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HISTORY

OF THE

BERWICKSHIRE

NATURALISTS' CLUB

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"MARE ET TELLUS, ET, QUOD TEGIT OMNIA, CŒLUM"

VOL. 48
PART 1, 1999

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HISTORY OF THE BERWICKSHIRE NATURALISTS' CLUB

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The Editing Secretary requests that all copy for the *History* should be submitted by the 30th April in each year.

ILLUSTRATIONS

HISTORY
OF THE
BERWICKSHIRE NATURALISTS'
CLUB

SOME MYTHS, SUPERSTITIONS AND CUSTOMS OF PREGNANCY AND CHILDBIRTH

being the Anniversary Address delivered by Mrs Bridget R. Darling, R.G.N., D.N.(Lond.), President of the Club, on 14th October, 1999.

INTRODUCTION

In 1931, the President, Sir George Douglas, Bart., introduced his address by referring to previous addresses, saying 'We were no longer bound, as in our earlier days, even to such vast subjects as the Natural Sciences, History and Antiquity, but were free to interpret our glorious motto in its very widest sense, and in fact, that henceforth each successive President has a perfectly free hand to deal with any subject whatever, claiming to belong to the domain of knowledge and culture, which happen to suit him best.'[1]

As I have no expertise in the fields mentioned above, although I have learnt a little during my 20 years' membership of this Club, my chosen topic is: *Some Myths, Superstitions and Customs of Pregnancy and Childbirth.*

Being a midwife was a privilege as well as a responsibility, and I was always conscious of the forces of nature.

I reassure you that I have omitted any reference to matters overtly sexual, or those that might offend anyone of squeamish disposition.

The Celtic goddess Brigit was the protector of women and childbirth. According to a Hebridean Christian fable Brigit placed three drops of pure water on the brow of the Baby Jesus.

Up to the sixteenth century, midwives (with-woman in English, mid-wif in mediaeval language) were a degraded group, contaminated by the nature of their work. Men were forbidden to attend births, and male physicians knew nothing of the social

rituals of childbirth. Witches were prosecuted for producing infertility, birth of illegitimate children, or death of legitimate children, so midwives were sometimes accused of having demonic powers, suffering accordingly.

Fertility rites are still part of some wedding customs today. Soot is traditionally associated with fertility as the hearth was considered to have magic qualities. Chimney sweeps are a symbol of this but also as a result of King George II's life being saved when a sweep pulled up his bolting horses. The king declaring after the experience that sweeps would bring good luck to the land. The rice or confetti thrown at weddings are also symbols of fertility. The bride's bouquet may contain gypsophila (baby's breath) to symbolise fecundity. In Europe, honey was a symbol of love and fertility in mediaeval times. Mothers-in-law would smear it on the lips of the bride, and honey was put on the door lintels of the couple's retiring chamber. Conversely, honey with opobalsam (balm of Gilead) was an electuary to prevent conception.

Conception for many women occurred all too often, but for some, barrenness was a terrible condition, and many were the potions and charms used in attempts to achieve pregnancy. To mention a few herbs:

Birthwort was once cultivated in herb gardens, used to aid conception and childbirth, and to ward off demons.

Stinking arrach, commended by Culpepper to make barren women fruitful, and to cool an overheated womb, this being one of the greatest causes of hard labour in childbirth. He also recommended motherwort in a syrup because 'it makes women joyful mothers and settles the womb . . .' and 'a spoonful taken in water is a wonderful help to women in their sore travail.'[2]

Aphrodisiac qualities were attributed to lady's mantle which was distilled and drunk for twenty days to aid conception. Savory, carrot, myrtle and mandrake were also recommended.

At the end of the sixteenth century, Margaret, Lady Belhaven, in East Lothian, made her own herbal remedies, collecting recipes and helpful hints from friends and relatives. Papers in the Scottish Record Office make fascinating reading. Asses milk, or claret taken hot or cold early in the morning or late at night, with or without herbal additives were particularly recommended.

Supernatural aids such as blood stone worn next to the skin

suspended from the waist, or astringent plasters impregnated with such substances as plantain water, turpentine, vinegar, juice of a leek, or oil of roses were thought to prevent miscarriage.

Dragon's blood is mentioned in many recipes. This is a bright red resin gained from trees in Africa, South America and the Far East, only a drachm or mite being needed.

The Eagle Stone, aitites, is the best known lapidary amulet. It is a mineral variety of argillaceous oxide of iron, a natural substance, hollow with a loose kernel at the centre. The ancients believed the eagle would carry aitites to the nest to facilitate the laying of eggs, and help maintain incubation temperature. The Department of Mineralogy at the National History Museum has a collection of stones from Hungary, South Africa, China and Scotland.

Wearing the stone was supposed to prevent abortion and ease childbirth.

Plutarch writes: 'the midwives place the stone on the lower abdomen of women who are giving birth with difficulty, and they at once deliver without pain.' It had to be removed immediately on the birth of the infant, lest complications such as an evoluted uterus occurred.

In 1633 the Countess of Newcastle was advised to tie the eagle stone around the thigh to make labour easier. More recently, in 1887, a French mineralogist is said to have received requests almost daily from pharmacists in Paris; such was the perceived benefit.

GENDER PREDICTION

Until ultrasound came first to be accepted in the 1950s then to be available in this country nowadays for almost every pregnancy (but still not with 100% accuracy it has to be said) much time was spent in guessing boy or girl.

Urine tests are found mentioned in early Egyptian papyri, which can be traced on with reasonable accuracy into Greek, then Roman, on to sixteenth century medicine.

Galen, born A.D. 130, suggests barley and wheat be placed in separate holes in the ground, sprinkled with the woman's urine, then covered with earth. If the wheat sprouted first, the child would be male, if the barley, female.

Galen also suggests parsley be placed on a pregnant woman's head without her knowledge; if she spoke first to a male she would bear a male. Priscian (4th century) and Constantine the African

(11th century) approved this method, but Joubert (1578) listed this among 'erreurs populaires'.

A Moroccan superstition involved dropping a louse on a pregnant woman's exposed abdomen – if it landed on its legs a boy was predicted, if on its back, a girl.

In Armenia, a woman would tear a hole in a cobweb: if the spider worked quickly to repair the damage a son was to be expected, if it was a leisurely repair, a girl.

Other predictions were based on numerology, phases of the moon, particularly as Lucina, the goddess of light and childbirth, was sometimes identified with the moon goddess Diana; and of course the tide, where birth would be on the incoming, and death on the ebb.

The use of the pregnant woman's golden wedding ring, suspended on a thread over the abdomen is still used today. It is said that if the ring birls clockwise it will be a girl, if it swings like a pendulum it will be a boy.

Carrying the baby broadly means a girl who is wrapping herself closely to the mother, whereas a boy striving for independence will be 'all in front'.

Childbirth was a social occasion enveloped in an aura of female ritual. Women delivered at home with several female friends in attendance known as 'gossips' – not a pejorative word, but a corruption of 'God-sibs' meaning 'Good Relatives'. They were charged with baptising the child, as well as giving moral support to the mother.

I am going to spare you details of crude attempts to speed delivery by magic potions, incantations and various very unmedical practices which often resulted in death to both mother and child. Flint was worn, or placed in the bed, to ease labour; open scissors or shears were placed below the bed 'to cut the pain' and it is interesting to find in 600 B.C. salicylic acid distilled from willow (aspirin as known to us) being given for pain relief in labour.

Being born in the caul (or veil) describes the baby being born with the amniotic membrane covering the head. This happens infrequently, but at lambing time many of us have known the frustration of a lamb being born in the sheet, and perishing if neither the ewe nor the lamber take appropriate action.

The superstition that the caul would bring fame and fortune to

that offspring is world-wide from pre-history to present day, sailors and fishermen believing they would never drown whilst in possession of the caul. Inevitably, a black market flourished, and in the Napoleonic wars the price for British sailors reached 30 guineas. By the First World War, with submarine attacks greatly feared, prices were about 5 guineas. There was so much fascinating information on the caul, it could almost have been a lecture in itself.

Immediately following birth, custom decreed the baby to be 'lickered with the basting tongue' and scoured with salt, which might also be given orally. Salt in olden times was considered the emblem of Eternity and Immortality, and signified the entry on an eternal course of weal or woe.

If the baby had a privileged background, it was rubbed with oil of roses, otherwise butter and warm wine was used. Next, a purge was given, and the baby swaddled. This was thought to straighten arms and legs, and to keep the infant warm. Full swaddling stopped at six weeks in England, but continued for longer on the Continent. For this procedure, bandages of seamless clean wool three fingers-breadth wide were used for each limb, then longer bandages used for a state of near mummification. I am glad to say babies were bathed daily during the swaddling period.

The cradle was never made of elder, else witches would rock it severely, or even gain power over the child. Ash was the recommended wood. The first bath of the infant was given before a fire of ash wood. An iron knife, open scissors or salt kept in the cradle would ward off evil spirits. It was also thought the baby should be carried upstairs before down, to ensure its rising in afterlife.

To celebrate the birth, the Merry Meal involved invitations to neighbours, during which the 'groaning cheese' and 'groaning cake' were cut. The ceremony of cutting of the cheese was generally performed by the father on the day of birth, taking care not to cut his finger, else the child would die within the year. In the north, once doctors were involved with the delivery they divided the cheese into 'whangs o' luck' cut from the edge in the exact number of those present. Dr Henderson of Chirnside, in his *Popular Rhymes, Saying and Proverbs of the County of Berwick* (1865) writes: 'The first cut of the cheese is divided into small squares or oblong pieces which are called the cuckold cuts. I cannot tell for what reason. These pieces are used by the young unmarried females, friends or

acquaintances of the patient as a sort of charm, they lay them below their pillows, that they may dream of their future husbands.'[3]

A Sunday born child was supposed to be free from the malice of evil spirits all its life. I quote a poem by Anon:

'Monday's child is fair of face
Tuesday's child is full of grace
Wednesday's child is full of woe
Thursday's child has far to go
Friday's child is loving and giving
Saturday's child works hard for its living
But the child that is born on the Sabbath Day is blithe
and bonny, good and gay.'[4]

In the Scottish Highlands, a variation goes thus: Tuesday's child will be solemn and sad, while Wednesday's is merry and glad. However, Thursday's child is inclined to thieving.

Childbirth was followed by 'lying in', generally a month. Friday was considered an unlucky day, so the mother would have to wait an extra day before arising. In some areas, mother and child came downstairs for the first time on a Sunday, when the mother would be churched. This custom derived from a Jewish purification rite making the woman fit to enter the sanctuary. It took place after 33 days for a girl, 66 days for a boy. By the early modern period, churching had evolved into a thanksgiving for safe deliverance 'in the great danger of child-birth'.

BAPTISM

It was thought witches or Satan could steal the soul of an unbaptised baby. Closely allied to this was a common mediaeval belief that the devil or fairies would kidnap one's healthy child, substituting one of inferior quality, usually having a physical deformity. Many fairy stories, Shakespeare and Spenser mention changelings. To avert the possibility a piece of iron, some salt or the father's coat were placed on the bed-foot, or the bed itself was 'sained' by carrying round it a lighted torch or candle.

Both religion and folklore demanded early baptism, even after the Reformation it was within two days. It was considered good if the baby cried lustily at the moment of baptism to drive out the devil. Those of you who visited Crichton Collegiate Church in July will remember the font being at the south door, and being told that the north door was opened at baptism so that the devil could fly out.

European Christening gowns are traditionally made twice as long as the baby, to fool the evil spirits into thinking it is an older child on its way to church. In the north, the child would wear its christening cap the next night, so woe betide the priest if he made it too damp!

THE WET NURSE

Until the mid-18th century, for the upper and middle classes, country air and a robust wet nurse were considered excellent. She had to be healthy, strong, kind, sexually abstemious and of appropriate complexion (red hair and freckles were not to be contemplated!) Good manners and civility were important, as these traits would be passed on in the milk. There was also a general belief that the wet nurse should have born a son, therefore having better milk. However some thought the nurse's child should be of the same sex as that to be nursed, so that her milk would be 'correct'.

A large bosom was considered a potential threat to the baby growing up with a squashed nose. In 1689 Princess Anne bore a son after twelve miscarriages and the death of three infant girls. Prince George selected a Mrs Pack who was plain, dirty and with a ruddy complexion on the strength of her gigantic breasts – we are told the baby thrived at first but died in infancy.

Lactation was very important. In the 16th and 17th centuries remedies were prescribed from more than 65 different ingredients. Fennel, aniseed, dill, parsnip, lettuce and rocket featured, as did powdered earthworms.

Jane Sharp in 1671 wrote: 'Some prescribe the hoofs of a cow's forefeet dried and powdered, and a dram taken every morning in ale: I think it should be the hoofs of the hinderfeet for they stand nearest the udder where milk is bred.' [5] Culpepper advocates the use of sainfoin, or rock crystal mixed with honey and taken internally.

Milk from a cow that had eaten butterwort or bog violet was said to protect a newborn child, and milk containing hazelnut was said to keep away witches.

Weaning took place on the appearance of milk teeth, 20 being recommended by a French surgeon in 1790. It was also thought the moon should be waxing rather than waning. This folk belief was strong that every treatment should have an increasing effect if aided by the waxing moon.

In early years a variety of charms and superstitions abounded. I mention just a few. Finger nails should not be cut the first time, but bitten off, else the child would grow up light-fingered. However, in Somerset, nails could be cut over the Bible. Nail-pairings, hair-clippings and milk teeth should be burnt lest a witch obtain them. The coral used at teething time was a charm against evil, and if there was sufficient space between front teeth for a small coin to pass, that child would always be lucky.

Finally, you have been taken through the Dark and Middle Ages into the enlightenment of modern medicine. Pregnancy can still, however, be a time of 'old wives tales'.

The birth process has not altered over the centuries but the outcome has with the safety of both mother and baby having come æons from the terrible mortality rates accountable to ignorance, necromancy and lack of hygiene.

'Our glorious motto' referred to in the opening paragraph is 'Mare et Tellus, et, quod tegit omnia, Cœlum'.

I bring this address to its conclusion by quoting:

A Gaelic Midwives Blessing

The little drop of the sky, on thy forehead, beloved one.
The little drop of the land, on thy forehead, beloved one.
The little drop of the sea, on thy forehead, beloved one.
To aid thee from the fays, to guard thee from the host;
To aid thee from the gnome, to shield thee from the spectre;
To keep thee for the Three, to shield thee, to surround thee;
To save thee for the Three, to fill thee with the graces;
The little drop of the Three, to lave thee with the graces.[6]

NOTES

1. *History of the Berwickshire Naturalists' Club*, xxvii, 279.
2. Culpepper, Nicholas (1995), *Culpepper's Complete Herbal*, Wordsworth Editions Ltd, Denmark, 171.
3. *History of the Berwickshire Naturalists' Club*, xxix, 52.
4. *The Oxford Dictionary of Quotations* (1949), Oxford University Press, 525.
5. Sharp, Jane (1671), *The Midwives' Book or the Whole Art of Midwifery Discovered.*
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THE ORIGINS OF THE MOTTO AND BADGE FOR THE BERWICKSHIRE NATURALISTS' CLUB

Bridget R. Darling
The Old Manse, Gavinton, Duns, Berwickshire TD11 3QT

Whilst researching for my Presidential Address I found *A Gaelic Midwives Blessing*. The words 'sky, land, sea' jumped out at me and the appropriateness struck a chord.

Having used the Club motto in Latin 'Mare et Tellus, et quod tegit omnia, Cælum', it became apparent after the address that some members had no knowledge of Latin, and had therefore missed the point. This led me to muse on how the motto and badge came to be chosen.

Conversation with the Club Editing Secretary, Dr Blench, ensued and I am grateful to him for his interest and guidance.

Ovid, *Metamorphoses* Book I lines 1-20:[1]

In nova fert animus mutatas dicere formas
corpora; di, coeptis (nam vos mutastis et illas)
adspirate meis primaque ab origine mundi
ad mea perpetuum deducite tempora carmen!
Ante mare et terras et quod tegit omnia caelum
unus erat toto naturae vultus in orbe,
quem dixere chaos: rudis indigestaque moles
nec quicquam nisi pondus iners congestaque eodem
non bene iunctarum discordia semina rerum.
nullus adhuc mundo praebebat lumina Titan,
nec nova crescendo reparabat cornua Phoebe,
nec circumfuso pendebat in aere tellus
ponderibus librata suis, nec bracchia longo
margine terrarum porrexerat Amphitrite;
utque erat et tellus illic et pontus et aer,
sic erat instabilis tellus, innabilis unda,
lucis egens aer; nulli sua forma manebat,
obstabatque aliis aliud, quia corpore in uno
frigida pugnabant calidis, umentia siccis,
mollia cum duris, sine pondere, habentia pondus.

English translation: My mind is bent to tell of bodies changed into new forms. Ye gods, for you yourselves have wrought the changes, breathe on these my undertakings, and bring down my song in unbroken strains from the world's very beginning even unto the present time.

Before the sea was, and the lands, and the sky that hangs over all, the face of Nature showed alike in her whole round, which state have men called chaos: a rough, unordered mass of things, nothing at all save lifeless bulk and warring seeds of ill-matched elements heaped in one. No sun as yet shone forth upon the world, nor did the waxing moon renew her slender horns; not yet did the earth hang poised by her own weight in the circumambient air, nor had the ocean stretched her arms along the far reaches of the lands. And, though there was both land and sea and air, no one could tread that land, or swim that sea; and the air was dark. No form of things remained the same; all objects were at odds, for within one body cold things strove with hot, and moist with dry, soft things with hard, things having weight with weightless things.

It will be noticed that the quotation was adapted for use as the Club motto:

ante being dropped, and *terras* (an accusative governed by *ante*) replaced by *tellus* (the earth, or earth).

Unfortunately no records have been traced as to how the founders of the Club decided on the motto, or the date of its inception.

In 1925 on Thursday, 28th May, the Club visited Bunkle Edge.[2] At the large oval fort at Dogbush (Berwickshire Inventory No. 17) the ground within the fort was carpeted with wood sorrel. 'The Secretary reminded members that this was the favourite flower of Dr Johnson,[3] the founder of the Club and suggested that should the Club ever decide to adopt an emblem, none would be more suitable than this beautiful plant'.

At the annual business meeting on 8th October 1925, the adoption of a Club badge was considered.[4] 'Colonel Leather explained that it had been felt that the wearing of a badge would enable members coming to meetings to recognise fellow-members and would conduce to the development of the social side of the Club. After discussion, the matter was remitted with powers to a

committee consisting of the officials, with the addition of the retiring President.'

In 1926 the badge as we see it today was adopted. Made by Reid and Son, the cost was 2/-, 199 were sold (there being 403 members paying a subscription of 10/-).

'Had there been room on the small token, it might also have contained the initials of our Club, or even its motto.'[5]

The President, Rev. Henry Paton, M.A., of Peebles, is quoted as saying 'This motto strikes me as one which is most comprehensive and ambitious. More we could not have, yet less would not suffice, for it is in every portion of this threefold realm that we find scope for our powers of observation and food for our wonder and delight. It is a motto which covers the orbit of the activities of naturalists universally.' In fact, the President used the motto as the basis for his address.

Having satisfied my curiosity as to how the motto and badge came into being, their relevance is surely as pertinent in the 21st century as in the early days of the Club.

By a happy coincidence, a recent exhibition by local wildlife photographer Laurie Campbell had a picture of a wood sorrel colony growing in a mossy cleft in an oak. This has been enlarged, framed and hung in our library.

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1. English translation, Frank Justus Mitter: Loeb Classical Library 2nd edition, 1921.
2. *History of the Berwickshire Naturalists' Club*, Vol XXV, p. 338.
3. *The Natural History of the Eastern Borders*, p. 166.
4. *History of the Berwickshire Naturalists' Club*, Vol XXV, p. 379.
5. *History of the Berwickshire Naturalists' Club*, Vol XXVI, p. 2.

Wood Sorrel, *Oxalis acetosella*

Botanical Information

Natural order:	*Geraniacae*
Growth:	average height 2-8 inches (to 15 cm)
Name:	from the Greek, *oxys*, sharp or acid
	from the Latin, *acetum*, vinegar.

Plants were cultivated for oxalic acid. A native perennial growing among rocks in damp woods, it flowers April to June. The

leaves are of shamrock origin, closing up with the flowers at sunset, and on the approach of rain.

Culpeper writes that the leaves 'are of a fine sour relish, and yielding a juice that will turn red when it is clarified, and makes a most dainty clear syrup'.

Medical properties included hindering putrefaction of blood, and ulcers in the mouth and body. Poultices using the juice applied to inflammation 'doth much cool and help them'. The juice was also recommended to heal wounds or to stay the bleeding of thrusts in the body.

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THE EDNAM SOCIETY AND THE MONUMENT TO JAMES THOMSON

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Whitehall, Old Cleeve, Minehead TA24 6HU

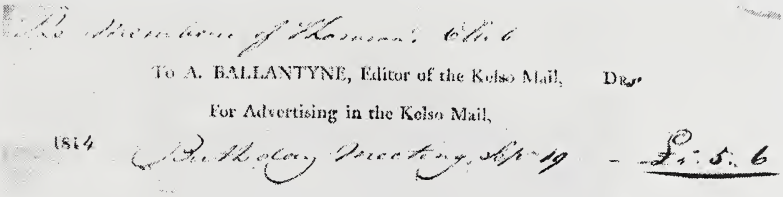
In September 1790 Walter Scott, Whilst dining with Lord Buchan, heard that he was thinking of erecting a monument to James Thomson (1700-1784) poet.[1] Lord Buchan went on to found an annual Festival in Commemoration of James Thomson[2] and an Eulogy of the poet was delivered by Lord Buchan on Ednam-hill when he crowned the first edition of the 'Seasons' with a wreath of Bays on 22nd September 1791.[3] Robert Burns declined an invitation to attend.

The Club met for the first time in 1791 but it was before 1806 that an Ednam Society Subscribers' Committee was formed, for in that year Walter Scott wrote to the Duke of Buccleuch forwarding a copy of the 'minutes of committee of some gentlemen in Roxburghshire who are desirous to have your grace's countenance in erecting a monument in memory of the poet Thompson, (sic), near Ednam the place of his nativity'. He goes on to say that he thinks the design is highly laudable.[4]

By 1811 Walter Scott wrote to Matthew Weld Hartstonge, an Irish author, saying, 'we are not famous for doing anything to preserve the memory of our Bards. I have been these twenty years member of a club for erecting a monument upon Ednam-hill to the memory of Thompson, (sic), but alas we have never to this day been able to collect above a very few hundred pounds, totally inadequate to making anything respectable'.[5]

The first advertisement for members of the Ednam Club to meet was published in the *Kelso Mail* on 19th September 1814. (Fig. 1)

In an undated, probably about 1810, report of the committee appointed by the subscribers to the monument intended to be erected in memory of Thomson several members, Robert Walker of Wooden, George Waldie, Rev. Robert Lundie, Doctor Douglas and Bailie Smith examined four sites. The first on Ednam-hill, which possessed a fine view and where a monument would make a striking feature in the landscape. The second site, Ednam



To A. BALLANTYNE, Editor of the Kelso Mail, Dr.

For Advertising in the Kelso Mail,

1814 Thursday Sept 19 - £1. 5. 6

EDNAM MEETING
ON THOMSON'S BIRTH-DAY

THE Members of the EDNAM CLUB, and their Friends, are respectfully reminded, that they are expected to meet at EDNAM, on Thursday first, the 22d instant, to celebrate the Anniversary of the Poet's Birth. ~ Dinner on the table at four o'clock

Kelso September 19, 1814

FIGURE 1. *Extract from the* Kelso Mail, *19th September 1914. Invoice: Alexander Ballantyne, Editor of the* Kelso Mail.

Churchyard, was dismissed, there being little room for an obelisk without encroaching on to a private burial ground. The third site was at the confluence of the Eden with the Tweed close to the Coldstream to Berwick road. This site was much admired for its setting and a richly wooded background though comments were made of its distance from and not within view of the vicarage. On the other hand, the expense of erection would be considerably less than for the other sites, being nearer the quarries, and access and fencing would cost almost nothing. A fourth site was considered, Spittal-hill (Ferney-hill), which disclosed equally as an extensive view as at Ednam-hill excepting that it excluded the Vale of Eden westwards. It was in view of the village and because on a lower plain to that at Ednam-hill any monument erected would not look so diminutive.[6]

The committee received in 1814 an estimate, £289 (£8,670) for an obelisk from William Elliott (1761-?), architect of Kelso, who was responsible for, amongst other buildings, Chesters House and Crailing House.[7] (Fig. 2)

The Royal Commission on the Ancient and Historical

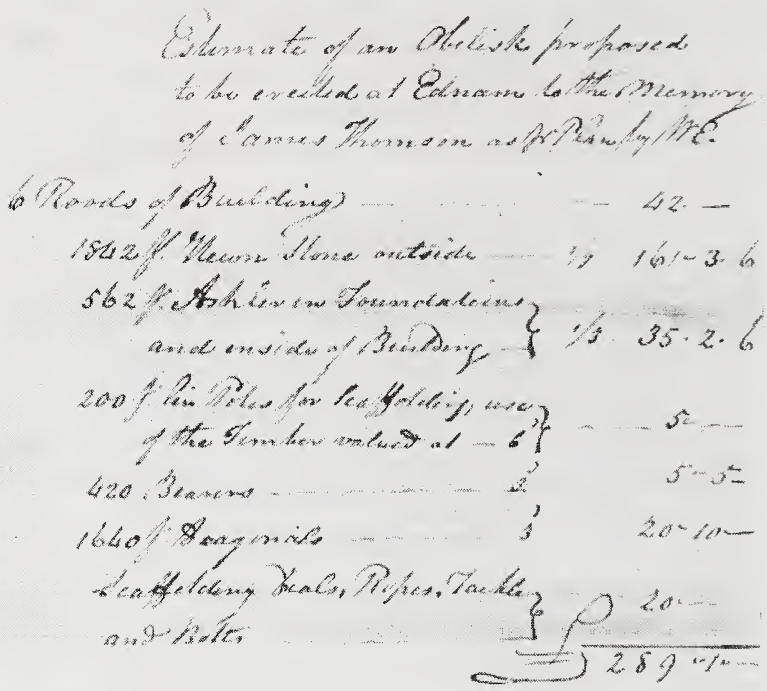


FIGURE 2. *Estimate for an obelisk to be erected at Ednam by William Elliott (1761-?).*

Monuments of Scotland hold drawings for a monument at Ednam by Joseph Bonomi (1739-1808)[8] dated 1797 and commissioned by J. R. Cuthbert (Fig. 3). Captain Dickson sold Ednam in 1781 to Arthur Cuthbert whose son James Ramsay Cuthbert succeeded in 1792.[9]

By 16th October 1818, a general meeting of the committee of subscribers was convened in The Town Hall at Kelso, chaired by Sir George Douglas with present Sir Henry Hall Makdougal, Robert Walker of Wooden, George Waldie of Hendersyde, Charles Ker of Gateshead. It was decided that having reviewed the estimate, plan and models tended by William Elliott, the obelisk should be fifty feet high and conform to the architect's specifications. A rider was added that the dimensions could be increased should the final subscriptions enable. The meeting then turned to the choice of site and by a large majority Ednam Spittal (Ferney-hill) was chosen by nine of the committee, two for Ednam-hill, and two for the confluence of the Eden with the Tweed.[10]

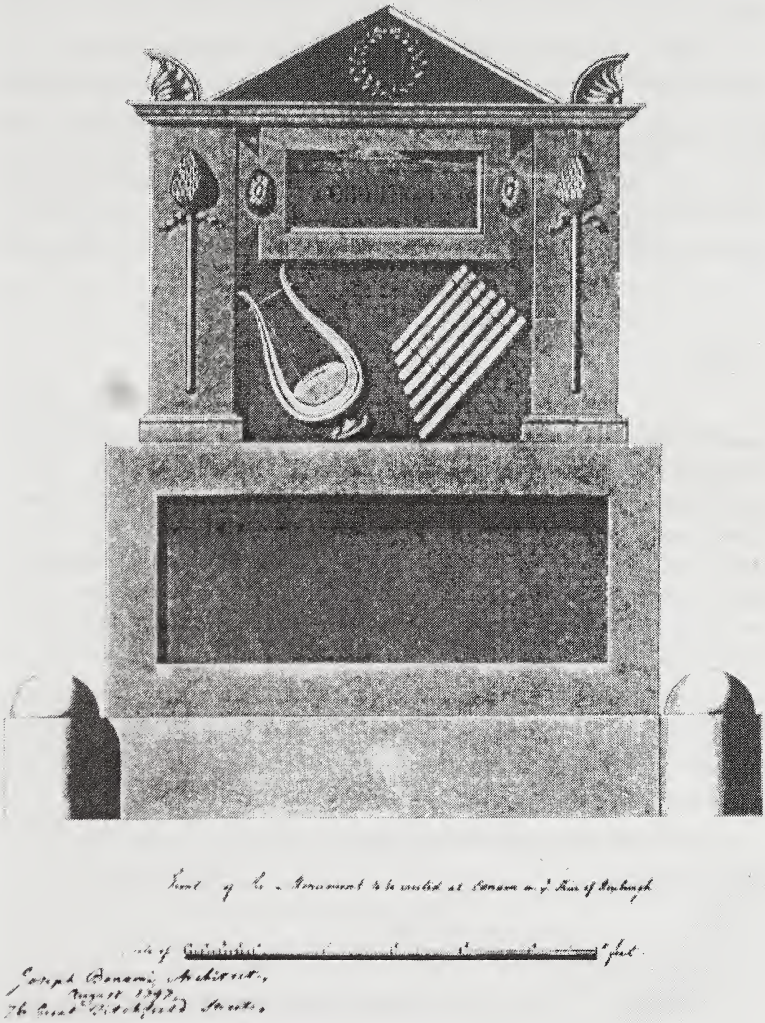
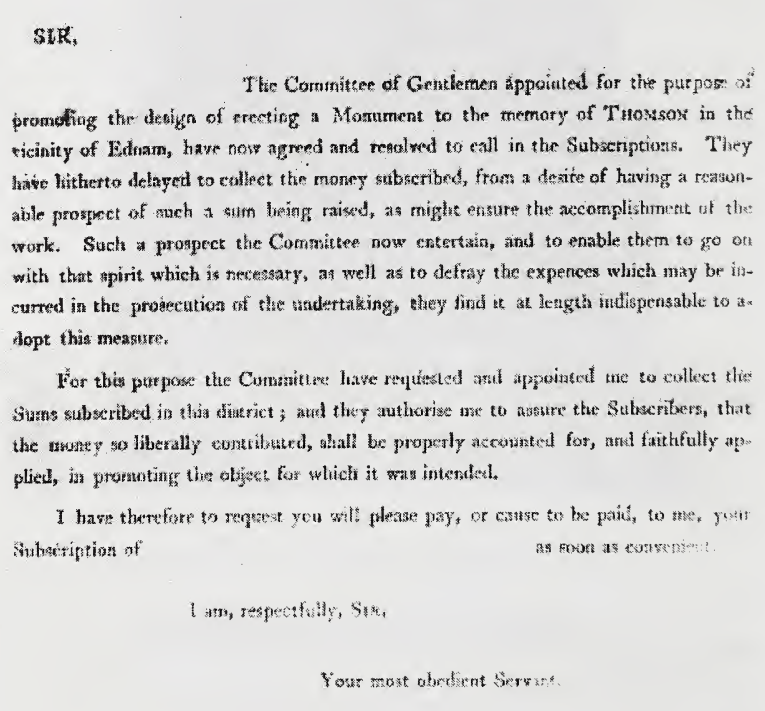


FIGURE 3. *Design for a monument at Ednam by Joseph Bonomi (1739-1808) dated 1797. Royal Commission on the Ancient and Historical Monuments of Scotland.*

Following this meeting a letter was sent to subscribers to call in their subscriptions. The committee was confident by then of the prospect of raising a sum sufficient to defray all costs. (Fig. 4)

Amongst those who subscribed by 1820 to a total fund of £347 (£10,410) were:

George Waldie of Hendersyde; Robert Walker of Wooden; Robert Davidson of Pinnacle Hill; James Potts, writer, Kelso; Rev. Robert Lundie, Kelso; John Waldie jnr of Hendersyde; Doctor James Douglas; Sir James Pringle, Bart; Sir Henry H. Makdougal, Bart; George Baillie, M.P.; Walter Scott of Abbotsford; James Ballantyne, Edinburgh; John Seton Kerr of Kippilaw; Sir Willilam Forbes, Bart; John Ballantyne, Edinburgh; Alexander Ballantyne,



SIR,

The Committee of Gentlemen appointed for the purpose of promoting the design of erecting a Monument to the memory of THOMSON in the vicinity of Ednam, have now agreed and resolved to call in the Subscriptions. They have hitherto delayed to collect the money subscribed, from a desire of having a reasonable prospect of such a sum being raised, as might ensure the accomplishment of the work. Such a prospect the Committee now entertain, and to enable them to go on with that spirit which is necessary, as well as to defray the expences which may be incurred in the prosecution of the undertaking, they find it at length indispensable to adopt this measure.

For this purpose the Committee have requested and appointed me to collect the Sums subscribed in this district; and they authorise me to assure the Subscribers, that the money so liberally contributed, shall be properly accounted for, and faithfully applied, in promoting the object for which it was intended.

I have therefore to request you will please pay, or cause to be paid, to me, your Subscription of as soon as convenient.

I am, respectfully, Sir,

Your most obedient Servant.

FIGURE 4. *Letter sent to subscribers by the Ednam Society Committee, probably 1818.*

Kelso; Sir Alexander Don, Bart; The Hon. G. Elliot, Minto; Alexander Douglas, W.S.; Capt. John Turner, 75th Regt; Sir John Pringle, Bart, Stichill; Andrew Douglas, Mason, Sprouston: one week's work equal to; Sir Francis Blake, Bart; William Dawson of Graden; Andrew Wood, Surgeon, Edinburgh; Lt. Col. David

Walker, 58th Regt; General Nicholson; Miss Murrays, Ednam; Robert Nichol, Edenbank; William Gordon, M.P.; Mr and Mrs William Hall, Charleton, Carolina; Ralph Oliphant, Marlfield; Charles Ker of Gateshaw; Carlyle Bell, W.S.; Sir William Home-Campbell, Bart.[11]

The Ednam Club erected the obelisk on Ferney-hill in 1820 bearing the inscription:[12]

Erected
In memory of
JAMES THOMSON
Author of 'The Seasons'
Born at Ednam
11th September,
A.D. 1700.

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I should like to thank Clare Sorenson and Diana Murray of The Royal Commission on the Ancient and Historical Monuments of Scotland for their advice; also to Rosamond Brown of The Scottish Borders Council.

The Bank of England for the comparative value of the pound sterling.

LOCAL NEWSPAPERS IN BERWICK AND THE BORDERS

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Newspaper publishing in Berwick has extended over 192 years and has been dominated by two families – the Smails and the Stevens.

The first newspaper in the Borders was the *Kelso Chronicle*, launched in 1783, suspended and then re-born in 1932. *The Kelso Mail*, with which Sir Walter Scott was associated as a reporter, appeared first in 1797 and then Berwick entered the scene with the arrival of the *Berwick Advertiser* in 1808.

Other papers followed, with the *Southern Reporter* at Selkirk and the *Berwick Journal* making their bow in 1855, the *Berwickshire News* in 1869 and the *Berwickshire Advertiser* in 1893.

In 1957 the Steven family sold out to the Smail family and the *Journal* was merged with the *Berwick Advertiser*. The *Berwickshire News* was retained, with the *Berwickshire Advertiser* being incorporated in it.

The Tweeddale Trio, owned by the Smail family, first appeared in 1931 when the *Kelso Chronicle* was acquired. By the early 1950s, with the firm expanding rapidly, the name became the Tweeddale Press Group and continued until 31st December 1999 when links covering eight generations and 192 years were finally broken. Now the Johnston Press, a major group with morning, evening and weekly titles on both sides of the Border, has taken over.

The Group enjoyed great success in the '50s and '60s when newspapers in Jedburgh, Galashiels and Hawick were purchased and eventually merged with the flagship *Southern Reporter*. By the 1980s, attention was being turned to the south. The launch of the *Alnwick Advertiser*, a completely new publication, created great excitement, and the *Morpeth Herald* and *Ponteland Observer* were also acquired. They ran within the Tweeddale Press stable until a major re-structuring led to the *Advertiser* closing and the *Herald* becoming part of the *Northumberland Gazette*.

That left the Tweeddale Press with its three main papers – the *Berwick Advertiser*, *Berwickshire News* and *Southern Reporter*, all of

which have won Newspaper of the Year awards to underline their quality.

The newspapers continue to be printed in Berwick, now the only publishing centre left in Northumberland, on a ten-unit Goss Community press installed in a new factory on the North Road Industrial Estate in 1989.

A year later high technology was introduced throughout the firm, with the most modern and sophisticated computers being installed, the papers prepared on-screen and journalists, at a stroke, becoming technicians as well as reporters.

The whole history of the Tweeddale Press has been one of evolution and responding to market opportunities and a great part of its success has been based on the family tradition – as it was with the rival firm operated by the Stevens.

The *Berwick Advertiser* first appeared on 2nd January 1808 from premises in Church Street. It began life as the *Berwick Gazette and Berwick Advertiser* and claimed to carry "an extraordinary influx of important intelligence". The first owner was Henry Richardson, son of a local printer. He died of a heart attack in 1823, and for the next 30 years the paper was carried on by Catherine Richardson, perhaps one of the first women in Britain to be involved in newspaper production.

She was succeeded by Andrew Robson, then by Dr Henry Richardson, a fleet surgeon who had just retired from the Royal Navy. For seven years he published the paper with Alexander Paton as his manager.

In 1868, Paton left to start up his own business as a shopkeeper, and Henry Richardson Smail, a nephew of the doctor, took over. He moved the printing works to West Street. At the turn of the century they moved again to 90 Marygate.

He died in 1917 and for two years until his son, Henry Richardson Smail returned from the Great War, Henry Smail Hamilton served as both manager and Editor.

Harry Smail, who held the rank of Major, continued until 1948 when he died suddenly and his cousin, Colonel Jim Smail, came over from New Zealand to take on the business and launch into a big expansion drive.

He died in 1995, and his son Derek then became the eighth generation of the family to head the firm.

His brother John edited the *Southern Reporter.* Their association with the Group ended on 31st December 1999.

The most famous Editors are acknowledged to be John Mackay Wilson, author of *Tales of the Borders*, and Alexander Russell who was in charge from 1839 to 1842.

However, added to that list must be Mary Gray, a stalwart of the Berwickshire Naturalists' Club, who steered the paper through the difficult wartime years and saw it prosper.

In 1951 Ian Fraser arrived from the *Newcastle Journal* to begin a 25-year stint which, for most of the time involved not only the *Advertiser* but also the *Berwickshire News.*

The current Editor is Janet Wakenshaw who took over in 1995 from Tony Langmack who served for 18 years and who retired in 1995 after 50 years with the firm.

The *Berwick Journal* was born in 1855 in premises in High Street, Berwick, and it was published by William Davidson and George Turner. They ran it until 1864, selling it at the unprecedented price of one penny. It was predicted it would never succeed but it did and developed so rapidly that other Border newspapers dropped their price to 2d, and some eventually to 1d.

The Steven family began their 93-year link in 1864 when G. Ferrier Steven acquired the firm. Within five years he had launched the *Berwickshire News*, a paper which quickly gained a high reputation and fierce loyalty from its readers.

The Steven family tradition continued when Major Alexander Steven and then Alec C. A. Steven took over, and Alec's brother Ferrier also joined the company setting up the very popular Border Series shops in Berwick, Duns and Jedburgh.

Ferrier was joined after the war by his sons Ferrier and Donald, with another son, Watson, joining the Border Series and serving at both Berwick and Duns. In 1957 the *Journal* and *Berwickshire News* were sold to the Tweeddale Press Group run by the Smails who, for so many years, had been their bitter rivals. The Editor of the *Berwickshire News* is the popular David Johnstone, who has held the position for 25 years.

The *Southern Reporter*, which now dominates the central Borders, was acquired by Colonel Jim Smail in 1951. It was a deal which strengthened the whole base of the Berwick newspapers. The *Southern* was started in 1855 by George Lewis who had earlier

dabbled briefly with the *Selkirkshire Advertiser*. He then decided there was a need for an influential paper in Selkirk itself.

The three surviving papers of the Tweeddale Press Group are now accepted as market leaders, and have entered the 21st century buoyant and confident.

They are on the Internet and have set up a highly praised web site to keep abreast of the rapid electronic advances.

Under new owners, they are looking ahead with enthusiasm and confidence.

THE ROMANCE OF THE BEE

This paper was written before 1927 by Miss Bertha B. Bell of Low Fell, County Durham, who was the mother of Mrs M. F. Pyman of Gosforth, Newcastle upon Tyne; added to by Mrs Ann Middleditch of the Chain Bridge Honey Farm, Horncliffe, Berwick upon Tweed, and by D. C. Souter, Member, Detchant Park, Belford, Northumberland NE70 7PQ, and edited by them both.

A hive of bees! what magic in those words! to most of us it brings memories of summer days, blue skies, fragrant flowers, and the pleasant hum of busy workers and the more noisy hum of drones among the flowers. To most of us also the hive is a wonder box in which the bees live and from which men, women and children get honey in some miraculous way. How much more wonderful to those who know about the busy little inhabitants. In that small structure are a queen, thousands of workers and a few hundred drones, all having an important duty to perform.

From the name queen one might imagine that she ruled the hive, but her's is a very limited monarchy; in fact her whole life is regulated by her people. It's a government 'of the people, by the people and for the people'. Of course, as she is mother of them all, they treat her with great deference and take the most tender care of her. Whether it is out of love for herself or the mission she represents is another matter, but whatever the reason is, she is most carefully looked after. Her attendants never leave her, they feed and groom her; so devoted are they that they will die of starvation while feeding her. It has often been noticed when a queen is being sent by post accompanied by a few workers and some food, that when they reach their destination the workers will be dead or dying while the queen is quite spritely having been fed while the others starved. When she is old and useless they won't kill her directly, for their sting must never be used against royalty, but they will surround her with a living prison made of their bodies and keep her there until she is suffocated, perhaps for 24 hours. This is called 'balling' a queen. The same method is used if another queen is introduced into the hive. If the old queen is superseded by a young queen to replace the old queen she is simply left to wander about the hive

without the colony swarming. She is left until she dies naturally rather than being 'balled'. The new young queen commences laying so that the two queens live together quite amicably in the same colony. The bees may ball the queen if the hive is stressed usually by beekeeper intervention or if a new queen is introduced from outside without precautions like a queen cage. However their treatment of the reigning monarch is all that can be desired. She is fed on specially pre-digested food and the number of eggs she lays is regulated by the amount of food given to her. In the height of her power and when honey is flowing freely she will lay 3000 eggs in 24 hours, each a perfect miniature of a hen's egg. That is her sole mission in life and with her rests the future prosperity of the hive.

She is more delicately made than her subjects; her body is long and slender, her wings short, her coat darker and richer and her legs bright brown. She moves among her people with dignity and grace. Her sting is the shape of a scimitar and must only be used against an equal – another queen and rival.

Next come the workers. They are the smallest bees in the hive, like the queen in form, but not so delicately moulded and duller in colour. They are undeveloped females. The sting is barbed, so when it pierces the skin it cannot be quickly withdrawn and generally has to be left behind, which causes the death of the bee. Wasps on the other hand, have no barb on the end of their sting. To pull it out so retract their sting completely.

The bee sting contains a sac of poison called Melletin which stays with the sting. To pull it out with thumb and finger compresses the sac, releasing the poison into the body, causing some pain. To dispose of the sting and sac it should be scraped off with a thumb nail.

To relieve the pain, bee stings should be dabbed with ammonia, and wasp stings with vinegar. AB-VW to help remember.

In a prosperous colony during the summer there will be 30,000 to 60,000 workers, every one living a life of toil, a life given wholly for the benefit of the community. They gather nectar from the flowers, often flying up to three miles to obtain it; this they turn into honey by a certain digestive process and deposit it into cells. As it contains too much water they evaporate it by fanning. They also collect pollen which they carry in sacks formed in the hind legs; this is used principally to feed the young larvae and adult workers,

needed for proper development of their wax and brood food glands; and propolis – a glue-like substance found on pine, horse chestnut and other sticky trees. With this they strengthen the combs, and seal up any holes through which draughts or water may come. They manufacture wax and build the combs which serve as cradles of the race and vats for storing honey for winter use. They incubate the eggs laid by the queen, feed, nurse and care for the young; keep the hive spotlessly clean, guard its entrance with such careful vigilance that no stranger may enter, like mice – unless perhaps laden with nectar. 'Fanners' are appointed at the door to circulate the air inside during warm weather and when the hive is becoming overcrowded. They wait upon her majesty and see she lacks nothing. So hard do they work that in the height of the season a worker will only live a few weeks. If they are lucky enough to be born in the Autumn, however, they live through the winter to start the work in the Spring which succeeding generations carry on.

Finally come the drones or males of which there will be 300 to 400 in the summer. They are noisy bulky creatures that gather no honey – in fact nature hasn't fitted them to do so. One thing in their favour is they have no sting, but of course that is a purely negative quality. Their sole use is that one of them will be the mate of a future queen, and for this reason alone they are tolerated in the hive and allowed to feed freely on the honey gathered and stored by the workers (females). If we might look into a hive in early Spring, and follow the movements of the inhabitants throughout the season of their activities, what an example we should have before us of labour and self sacrifice. With the first sign of Spring, in February or so, the bees inside the hive begin to stir, they look around to see what damage has been done during winter, examine the doorway and on mild days take short flights at any time if the temperature is high enough. They will take cleansing flights whenever the opportunity arises. Spring cleaning commences with full vigour and consists of removing the winter dead, clearing the floor of bits of broken comb and repairing the combs and generally making the home sweet and clean. The queen also wakes up and commences her maternal duties once more. She will be found in the very centre of the hive – the warmest part – moving in small circles from cell to cell, examining and depositing an egg in each, which will be carefully brought to maturity by the workers.

An egg which will hatch into a worker and appears like a tiny bit of blue and white thread, is laid in an ordinary cell which is ½" deep and 1/5" wide. In three days it will hatch and a tiny white grub will appear which is carefully fed – the first three days on specially pre-digested food, a secretion from the glands, and then honey and pollen, all of which has been stored from last season for as yet there is only a cold hard world outside. By the 9th day from the egg being laid the grub has grown to full size, so now the cell is sealed and capped over with wax and pollen, which is porous. The grub is now occupied for a day spinning a cocoon about itself then gradually undergoes a stupendous change. And thirteen days after the cell was capped issues forth as a perfect bee – that is 22 days after the laying of the egg.

She bites her way through the capping and assisted by her nurse, grooms herself and in a few minutes is able to walk about the hive. For the next fortnight she assists with the work indoors, and at the end of that period flies freely from the hive to help gather in provisions.

Gradually as the sun gets stronger and spring flowers begin to appear, food becomes more plentiful and the queen's rations are increased, therefore her propagating powers are stimulated, so the population increases enormously and soon becomes dense.

At this period, perhaps in May, drone cells are built which are larger than those in which a worker is hatched, being ¾" deep and ¼" wide, and in these which will have raised wax caps the queen lays drone eggs which are looked after in the same way as those of a worker but take 25 days to mature. The population continues to increase, bees coming back laden with nectar hesitate before entering the already overcrowded hive, for the heat inside is getting unbearable. It is plain something must be done to put an end to this congestion, so they decide to leave their home. Who takes the first step in this discussion or by what means they come to an agreement is unknown. Maeterlinck puts it down to the 'Spirit of the hive' which governs the whole life of the colony and decrees when this hour of sacrifice shall come. For it must be understood that this leaving of the hive or swarming is one of the finest examples of self-sacrifice nature can show us. For weeks and months have the bees been working at full pressure, building up their city and filling it with vast wealth and at this moment it is at

the height of prosperity. One might think they could live on their wealth for a bit and enjoy a rest – at any rate they might take life easily and not work quite so hard. After all, they need not have let the hive become so overcrowded.

It seems, however, that work is the keynote which rules the hive, and while there are flowers and sunshine, nectar must be gathered in. And to what end do they work? To willingly sacrifice everything to the coming generation, to leave their city and start afresh in a rather unfriendly world.

If disease attacked the hive and the inhabitants were dying off by the hundreds they would remain and support the queen and city to their last breath. If disaster in any shape or form came to the hive they would remain as long as ever possible, but in the height of prosperity they leave. Their queen must accompany them willingly or not, for without her the new colony they are about to found would be empty, but they mist not leave the old city queenless, so before they go, they build special cells – to be the cradles of princesses and in these the queen innocently lays an egg which will become her successor. These cells are large and have thick walls and to make them several worker cells are sacrificed. The egg laid is just the same as that which produces a worker, but the rearing of the royal infant is different. After the egg is hatched it is fed on special food – called Royal Jelly – a richer substance altogether than that given to the worker, and she is fed on this during the whole time she is in the grub state, whereas the worker is put on to coarser food after the third day. Her cradle, being so much larger and more luxurious, she has ample room to develop. A curious fact is that she matures more quickly than the worker and on the 16th day is ready to vacate her cell.

Though the bees about to quit the hive are willing to risk everything themselves they won't leave anything to chance which concerns the future of the home colony, so several royal cradles are built in case anything happens to one or more of the princesses. They are also built at different times so that two queens won't come into the kingdom together.

Now that everything is right at home and the first queen cell capped over, they prepare to leave. One forenoon on a warm day frenzy seizes the hive, bees dart in and out in tremendous excitement, the queen rushes from comb to comb, sometimes trying

to destroy the young princesses who permit this emigration. Vats of honey are opened and hundreds of workers gorge themselves to be fortified for the adventure. The temperature is steadily rising to an unbearable degree. At last the supreme moment has arrived and at noon, two-thirds or about 40,000 bees pour out of the hive in wild excitement. At first they circle about the hive buzzing loudly in their ecstasy, until the queen joins them, when they make for a branch of a tree, or some such place, generally near the hive. Sometimes they will all get out and find the queen has remained behind, so back they will go and drive her out. She isn't used to bright sunlight and can't fly far at first as it is about a year since she left the hive, either the last time her colony swarmed or for her nuptial flights, so she is glad to rest on a near tree. As soon as she settles, her subjects cluster about her forming a compact mass and so still do they stay that they resemble a plum pudding attached to the tree, about 8" wide by 14" long. At this point it is well for the beekeeper to secure them for they have sent out scouts to choose a suitable place for the new home. If the swarm is accessible on a branch, in a hedge or wherever, the beekeeper should cut off the branch and drop it into a box or container; either it can be returned to its hive or, better, put it in a fresh hive. They will shortly come back with their various reports and then off will go the queen and her people to – most likely – a cranny in an old wall perhaps a mile away, or in the roof.

After being carefully hived by the beekeeper in a fresh hive they start work quite merrily and things go on in the same manner as before. Suppose, however, man didn't interfere and when the scouts returned with their reports the matter was thoroughly discussed and a habitation decided upon – say the cranny in an old wall – what happens then? There is nothing but an empty hole, which is not too clean and rather draughty.

The bees waste no time in despairing, but start at once setting things to rights, cleaning out all debris, filling up holes with propolis to keep out draughts and wet, and varnishing the walls. They grasp the shape of the hole, which of course may be anything and the mighty work of comb building starts.

It is a wonderful feat and is started in this way. One bee from the seething mass will ascend the wall until she reaches the top-most point, and there she will attach herself by her front legs, then Another will come and cling to the first and on and on they will come, one clinging to another until they form a living festoon across the top of the hive which acts as a bridge for others. Still they

continue to come until a compact mass is formed the shape of an inverted cone, and they will remain hanging in this position from 18-24 hours, generating an enormous heat. Then scales of wax begin to appear from the wax glands underneath the ventral plates of the body. These scales are so thin and light that it takes more than a hundred of them to weigh as much as a kernel of wheat.

Finally from this clinging mass one bee will emerge and ascend to the topmost point, knocking out of the way any bees that interfere with her. Then she will take the scales of wax from her body and transfer them to her mouth for further preparation; then she will proceed to knead it into the right shape and after fixing it to the ceiling she will disappear. After this foundation stone has been laid one after another emerges from the mass and does likewise until there appears a small block of wax hanging from the dome which is thick at the top and tapers down towards the edges.

Now the sculptors come in succession and mould the cells into shape. Sometimes twenty bees are needed for the preparation of one cell. They also do their little bit and disappear into obscurity. At the back and on each side of the first cell, two others are excavated and so the foundation of the first great edifice is laid. Row after row of cells are formed in like manner until the comb reaches practically to the floor. They don't wait until one comb is finished to start another – as soon as the first is fairly on its way, another is started in a similar way, being made parallel to the first and far enough away from it to allow two bees to pass each other. Thus comb after comb is built and the comb which is started first is always finished last.

During this process the worker bees fashion different sized cells, most for workers, and comparatively few for drones, in preparation eventually for the queen to lay her eggs, drones in larger cells. She measures the size of the cell with her head and forelegs; if the cell is the bigger, she does not release sperm, so the egg is unfertilised and develops into a drone (male bee). But into the smaller cells she releases sperm to fertilise the egg to develop into a worker bee (female). This is known as parthenogenesis and only happens in the insect world.

As soon as the cells are built eggs are laid in them and incubated. The regular work of the hive is started and carried on as well as the building activities; the one object in view being to build up a city as strong as the one they left and to have enough food stored to last

through the winter. For this end all put their shoulder to the wheel and work unceasingly.

Returning to the hive from which the swarm has issued. The small minority which has been left behind continues its existence of peaceful labour as of no interruption had taken place. Thousands of cradle cells are quickly replenishing the hive and things appear quite prosperous, but as yet there is no queen. However after 7-8 days from the swarm leaving the first princess will emerge from her royal cell – but not in quite the same way as a worker.

During the last few days of the period of transformation from the grub to perfect insect, the nurses have gradually been gnawing away at the cap of her cell until it is quite thin and when the royal infant is complete they pierce a hole through the capping; instead of letting her emerge as a worker bee would she is kept prisoner a day or so longer. She now pushes her long tongue or proboscis through the hole and receives food. Thus she gains full strength before appearing among her people. During this period of captivity she makes a curious piping sound audible to the beekeeper, as if announcing her royal presence to the colony.

Presently, when the bees think fit, she is released. As soon as she has found her legs, so to speak, she makes for the nearest honey cell and there drinks deeply so that she may be fortified for the strenuous work before her. Already she knows her rank and will permit no rivals to the throne, so being duly strengthened she makes for the other queen cells and endeavours to split them open and massacre her royal rivals.

Sometimes the bees stand calmly by and allow this, but sometimes they protect the royal cradles. However, no humane principle guides them.

If the massacre is not permitted, she wanders about the hive in a most disconsolate manner, uttering an angry war cry and watching for an opportunity to give vent to her feelings.

At this period there often seems to be a division of opinion about the queen. It might seem as if the calmer element wanted to see the queen mated and the future secure before killing off the other heirs to the throne, but that a few ardent royalists scorn this idea and force her to abdicate rather than permit it; so often a second swarm, called a cast, will leave the hive with the virgin queen. Sometimes this will happen four or five times as each princess hatches until the

hive is absolutely depleted. A kind of swarming mania seems to seize the bees and they risk the very dangerous business of starting a new colony with an unmated queen and, of course, generally comes to disaster.

Sometimes they all quietly decide to see the queen mated before allowing the massacre. Again, on account of mismanagement, two queens may hatch together. Then there is a battle royal, the survivor of which is the winner.

Taking the case where the young queen is permitted to slaughter her younger sisters and her bloodthirsty desires are satisfied, it is found that she becomes calmer, and for the next few days wanders about the hive, feeding on the honey and exploring the city – no one as yet taking much notice of her. Then one warm day, about noon, within five days from hatching or 21 from the egg being laid, she approaches the door, rushes in and out a few times in an excited state. Then at last she soars into the sunshine in ever widening circles.

Below, lolling about the flowers, several hundred drones are watching her timid flight and are instantly in full cry after her. The queen will mate with up to twelve drones during her flights which may take place on successive days. There and then, in the beautiful sunshine the wedding takes place and almost immediately afterwards the bridegroom dies and the bride returns to the hive never to leave it again until her swarming colony drive her; most likely next year.

Now that she is mated once and for all, she takes up the maternal duties of the hive laying at will either drone or worker eggs. As Autumn approaches provisions become more precarious and the need for strict economy arises. The honey they had stored has been removed; still the young 'cry out' from their cradles; it will take them all they know to get through the winter. Another sacrifice must be made, but this time the workers decree that the drones shall be sacrificed; so one day when they return from their daily saunter the sentry refuses admittance and that night they perish in the cold. Some seeming aware of their fate cling to the combs in feeble efforts for life, but the workers soon deal with them and they eventually join their brethren in distress.

That little scene over, honey is collected and stored whenever possible. The queen gradually stops laying and presently the hive

becomes silent. Inside the bees cluster together in the centre until all the storms of winter have passed. A prudent beekeeper in the autumn leaves in the hive additional food to honey-like syrup or confectioner's icing. It has been known that during a prolonged winter all stored honey has gone so that the bees have all died.

Bumble Bees

Bumble bees are similar to honey bees in the way the colony is organised, i.e. queen, workers and males, but the bumble bee colony dies out in the Autumn leaving only young mated queens which hibernate. In Spring, these queens (the big fat ones) come out of hibernation, feed up on nectar and pollen, and then seek out a suitable nest site – maybe an old mouse nest or other underground hole. Different species have different types of nest sites.

The queen bumble bee then makes a cosy little hollow and builds a few wax cells in which to lay eggs. She forages for pollen and lays down a store of pollen for the emerging larvae to eat. The bumble bee nest is more untidy than the honey bee. She also builds a tiny wax cup which she fills with a thin honey she makes from nectar. This acts as a food store for bad weather days. Once the eggs are laid, she broods them, keeping them warm with her own body heat. When they hatch, the young larvae eat the pollen. They pupate after a few days and emerge as worker bumble bees. Sometimes, if food is short, the workers are really tiny. They take over foraging and cell-building duties, leaving the queen to lay eggs.

In summer, the queen lays some unfertilised eggs which develop into males and the workers raise a lot of young queens from fertilised eggs. The males and young queens mate and so the following year's queens are ready to feed up on pollen and then hibernate. So the queen bumble bee is a lot more skilful than the honey bee queen in that she initiates the nest in spring, forages, broods on her eggs, looks after her first batch of brood and lays down a tiny amount of honey. Bumble bees don't store honey as do honey bees, so this is why the bumble bee dies out and honey bees live on from year to year. Also, bumble bee colonies are much smaller with only a few hundred individuals at any one time whereas a honey bee colony runs to many thousands, up to 50,000 or 60,000.

(*Edited by D. C. Souter, Member, and written by Mrs Ann Middleditch.*)

Kyloe Crags (opp. p. 12)

A. H. EVANS'S 'A FLORA OF THE TWEED AREA'

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Introduction

In January 2000 I received a letter from David G. Long, Royal Botanic Garden, Edinburgh, to tell me that Margaret Elliot, when tidying up archive material in their library, had come across a manuscript, 'A Flora of the Tweed Area', in files relating to the late Sir George Taylor. He kindly invited me to study the manuscript and I am most grateful to the Royal Botanic Garden for this privilege. This is an account of my review of these papers and their story.

The Berwickshire Naturalists' Club's Sesquicentenary Dinner, September 1981

The Club celebrated its 150th anniversary with a grand dinner at Marchmont. The *Berwickshire News and East Lothian Advertiser*, September 29th 1981 gives a much fuller account of the proceedings than the Club's *History* and, in particular, quotes verbatim from the speech made by Sir George Taylor, one of the principal guests: 'Another past president with whom I became very closely linked was Arthur Humble Evans who was the son of the vicar of Scremerston and became a member of the Club in 1875 and the first of his series of botanical papers appeared in the Club's *History* for that year. Though for most of his life he lived in the south, he made annual visits to his native Borderland and his interest in the plants and animals of the region never flagged. He was your President in 1900 and his address was on the migration of birds. His field was very wide and in 1911 he produced the classic volume entitled "A Fauna of the Tweed Area" in the admirable series of Harvie-Brown's *Vertebrate Fauna of Scotland*. In the late 1930s he sought my collaboration in the preparation of a similar work on "A Flora of the Tweed Area" and over the years I did contribute a little but the manuscript is still far from complete and will be preserved for future workers in the Royal Botanic Garden, Edinburgh.'

This then explains the presence of the manuscript in Sir

Rocks at Hutton Hall, on the Whitadder (opp. p. 64)

George's papers and serves also as a belated obituary of A. H. Evans, 1855-1943, of Clare College, Cambridge, as the Club's *History* gives only the briefest notice of his death, despite describing him as 'the father of the Club for many years'.

The Manuscript

The unfinished manuscript of the 'Flora' is in the dip-pen spidery handwriting of an octogenarian but mercifully there is a rough typescript as well. There are also some associated papers including the newspaper cutting referred to above, correspondence with Taylor, Miss I. M. Hayward of Galashiels and others, together with a list of the sources Evans had used for his 'Flora'. The 'Flora' consists of a general description of the area and individual species accounts. Evans was attempting a relatively popularist 'Flora' on a well-tried formula emphasising the physical attraction of the area and its rarer plants.

The 'Flora's' description of the Tweed Area

To understand the 'Flora' it is necessary to first consider Evans's earlier work. His *A Fauna of the Tweed Area* begins with an introduction that includes excellent biographical notes on the principal naturalists of the area over two centuries. Botanists as well as zoologists are included. The work itself opens with a 25 page narrative giving an overview of the physical features of the Tweed watershed (including the portion in Northumberland and also the coast to the Farne Islands) and some indication not only of the principal ornithological habitats but also of the botanical habitats. This narrative style is repeated in the 'Flora', clearly with a change in emphasis, but a reader who has read the 'Fauna' and has enjoyed its excellent photographs, some of considerable botanical interest, such as those of Kyloe Crags and habitats by the Whiteadder Water, and has a general knowledge of the principal botanical sites of the area will learn little more than Evans's perception of the rarities of the area. Curiously the 'Tweed Area' is defined slightly differently to his earlier work, keeping more closely to the county boundaries across the Lammermuirs.

An example of Evans's style is his portrayal of Cheviot. 'Around us is utter desolation, the peat-hags and rifted ground of Big Cheviot's top being of the most barren description, and producing

little but Cloudberry, *Rubus chamaemorus*, sedge, *Carex rigida* (now *C. bigelowii*), and flowerless cottongrass, *Eriophorum vaginatum*. There is no semblance of a peak, but merely a wild flat, intersected by irregular gullies which at lower elevations form the channels that convey the water to the various streamlets on the sides of the hill. Nevertheless the lower slopes of the hill are a well known locality for some of our rarest plants such as *Cornus suecica*, Dwarf Cornel, *Listera cordata*, Lesser Twayblade, and *Cryptogamma crispa*, Parsley Fern, while they are intersected by the only two rocky ravines in our whole district, Hen's Hole on the north side and the Bizzle on the south-east. The latter unites with the merely stony Goldscleugh to form the high pastoral valley of Dunsdale. These two rocky outcrops furnish several plants unknown elsewhere in our area, *Epilobium alpinum* (now *E. anagallidifolium*), Alpine willow-herb, and *Poa Balfourii* (the Cheviot plant is now considered a variety of *P. nemoralis*), as well as *Saxifraga stellaris*, Starry Saxifrage, and *S. hypnoides*, Mossy Saxifrage, also with arctic associations' (I have added the explanations in brackets and English names of the plants). This passage is drawn directly from *A Fauna of the Tweed Area*, except that the sedge is now named and the list of 'our rarest plants' replaces reference to Golden Plover, Dunlin, Peregrine Falcon and Raven.

The 'Flora's' Species Accounts

The species in the 'Flora' may be illustrated by a few examples:

'*Chrysanthemum leucanthemum*, L. Oxeye Daisy. Very common on roadsides and other untilled places.'

'*Campanula latifolia* L. A characteristic plant of our area met with in nearly every direction, but never very profusely. Being in its nature subalpine it is usually found near the hills, while among the Cheviots it occupies every dean of any importance. It is not, however, recorded from Peebles-shire. It ranges to the coastal deans, though not in abundance, and to some spots on our rivers. It is a general favourite in gardens in its white and purple form but the wild plant is lilac in colour.'

'*Pyrola media* Sw. More local than the last named (*P. minor*) and more of a moorland and hillside plant, which is usually plentiful where it occurs. The chief localities in Berwick-shire are near Penmanshiel but it grows in many places in that neighbourhood

and ranges to the Cheviots, the Dirrington Laws and to Kyloe in Northumberland.'

While these accounts are faithful and helpful they do reflect Evans's lack of recent fieldwork. The commoner species, such as *Leucanthemum vulgare* (as it is now known), are given with short, apt but bland remarks and there is often evidence of plagiarism from other floras, particularly the floras of George Johnston (1829, 1831, 1853), though this is not a matter for criticism. The detailed and entertaining account for *Campanula latifolia*, Greater Bellflower, demonstrates the limitations of this work. This species is in fact rather local and a list of at least selected sites would be most helpful. It does not seem to have been Evans's practice to systematically gather detailed records, except of the rarest species. In 1916 he wrote for the Club's *History* 'Notes on plants found in the District worked by the Berwickshire Naturalists' Club'. This added to a list published two years earlier by Mr Adam Anderson but much space is used by repeating records from Johnston's floras. Many of Evans notable records were made in three extensive trips with G. C. Druce (Ann. Scot. N.H. 1907, 1910, 1911) when one can conjecture that it was Druce who wrote the records down; nevertheless Evans did record notable species over a wide area and over a long period.

One suspects tricks of memory affecting the emphasis of his accounts. *Campanula latifolia* is not a hill plant, though it may have ventured higher when our hills were more wooded, but it is indeed a plant of deans and wooded riversides. Swan (1993) does not record it penetrating far into the Cheviots, nor do Baker and Tate (1868), but it goes higher in the Lake District (Halliday 1997). In 1916 Evans remarked 'It is not uncommon in our damper woods and deans, but does not usually occur near the coast'. This is more apt, though Evans is right to correct himself regarding the coastal deans. In this case it may be unfair to suspect an error in emphasis but a review of the 'Flora' from an historical perspective is doomed unless its limitations are appreciated. I am not alone in detecting lapses. Remarkably Evans also published *A Flora of Cambridgeshire* (1939) at the age of 84, building on his earlier work, *A Short Flora of Cambridgeshire* (1911), but a later 'Flora' by Perring, Sell and Walters (1964) found Evans's statements on a plant's frequency to be often misleading. *Campanula latifolia* is now in serious decline in the Tweed area. The loss of elms to Dutch elm disease has adversely

affected many of its remaining habitats and the sycamores that may replace the elms seem to cast too deep a shade to allow its recovery as the canopy redevelops.

The account of *Pyrola media*, Intermediate Wintergreen, commands attention but gives the plant as locally plentiful, especially in Berwickshire. In fact it may well have been extinct in that county by 1940. The last known Berwickshire record was in 1913 by W. B. Boyd at Abbey St Bathans, though two small colonies survive elsewhere in the Tweed area. Evans's account is a compendium of records from Johnston's 'Flora' of 1831 onwards and it is clear that he does not distinguish plants he saw in his youth from records of later years. More specifically there is very little evidence indeed of field records after 1916. I have worked through all the detailed records for Berwickshire and can only find one locality not published by 1916 which relates to Evans himself. This is an undated record of *Corallorrhiza trifida*, Coralroot Orchid, from 'Low Ground at Grant's House'. The same problem is found with Evans's *A Flora of Cambridgeshire* where we are told (Perring, *et al*, 1964) that 'old records were given without comment though the plants were extinct by that time'. A more positive approach is to regard Evans's *A Flora of the Tweed Area* as effectively dating from 1916, and indeed before changes that occurred during the First World War. It was the felling of woods at that time that probably put paid to *Pyrola media* in Berwickshire.

The species accounts lack those pages relating to the families classified from the ferns to the crucifers and omit a number of critical groups which Evans clearly intended to return to, including the pondweeds where he was conscious of the recent exciting discoveries of Sir George Taylor. He also almost wholly excludes aliens, partly from personal preference and partly because, strangely, he had difficulty in obtaining a copy of *The Adventive Flora of Tweedside* (Hayward and Druce, 1919). It is perhaps most understandable that he felt that the inclusion of aliens would have made his task wholly unmanageable.

The Legacy of the Flora

Evans's contribution to botany was his continued practice and enthusiasm for his subject over a period when the study of natural history in Britain was in severe decline. In this context his failure to

add significant records in his 'Flora' is unsurprising. Seeking a positive legacy from his work I extract below passages that express his passion for wild flowers and then attempt an analysis of those species where his accounts suggest an abundance in his day strikingly in excess of what we find today.

BROTHERSTONE'S POND

'Evans once went with a party of naturalists to Gordon, including Edinburgh students, who were shown the "*Utricularia* Pond". That season the growth was unusually dense and the middle portion of the *Utricularia* was forced partly out of the water. The middle portion took on quite a different appearance to the outer ring. Some of the Edinburgh students collected specimens of the middle portion and believed that the hairs in the bladder differed from those of *U. minor* (Lesser Bladderwort). They suggested that it might be *U. Bremii*, a risky suggestion in any case, as the plants in the centre of the pond were flowerless. This long explanation may seem unnecessary but nevertheless we find *U. Bremii* credited to Berwickshire.

'The Berwickshire Naturalists' Club members, who were the hosts, never took the matter seriously at the time, but now it is necessary to correct the mistake. What might be called Brotherstone's pond was full of *U. minor* alone.'

U. Bremii is now a discredited taxon but the Bladderworts still present taxonomic difficulty. The plant was last recorded at Gordon Moss in 1974 and is believed lost.

BIRD'S NEST ORCHID

'*Neottia Nidus-avis* (L) Rich. Not very uncommon in our damper deans, but local, and needs a careful search. It is chiefly found on loamy soil and avoids calcareous spots and is therefore seldom found on the Carboniferous, but almost always where the ground is somewhat clayey. Our present records are from Twizell House Dean, Houndwood, Old Cambus, Netherbyres, Dunglass Dean, the banks of the Jed, Bowhill, Langtonlees and Denholm Dean, showing a wide area of distribution.'

Bird's-nest Orchid is now approaching extinction in the Tweed area but Evans's description of its habitats is perceptive. Nevertheless the distribution in Britain of this orchid in the *Atlas of*

the British Flora (1962), does show a strong correlation with chalk and limestone. The situation in our area reflects the dearth of ancient woodland on the fertile soils derived from the Carboniferous balanced by calcareous springs in woodlands that are not on the Carboniferous.

A GREAT SURPRISE

Where the descriptive section of the 'Flora' deals with the coast north of Berwick, Evans writes '. . . where Halidon Hill descends from Mordington to Lamberton Moor and the coast *Vicia sylvatica*, Wood Vetch, on the sea and railway banks near Marshall Meadows and *Viola lutea*, Mountain Pansy, on the higher ground are the only scarce plants recorded, (added in manuscript) except *Orchis Morio*, Green-winged Orchid, from the moor and *Carex pendula*, Pendulous Sedge, below it.'

Mention of *Orchis morio* raised my pulse rate considerably, there are no other reports from Berwickshire, and indeed it is currently only known in Scotland from one small area on the Ayrshire coast, and is extinct in Northumberland. Turning to the species acounts we find '*Orchis Morio*. L. Our only station for this orchid is Lamberton Moor where a few spikes were picked in flower in June 1942 by Brown. It also occurs just outside our area at Ratcheugh Crag on the basalt'.

Lamberton Moor, as it then was, was perhaps the most likely place in the whole Tweed area for this southern species. There was damp base-rich grassland on the limestone with a wide range of most interesting plants, despite Evans's disparaging remarks about the absence of rarities. Only one fine fragment of habitat survives there today. *Orchis morio* is a species that is often so grazed that it does not flower and wartime could well have provided a disruption in grazing that enabled a long hidden colony to flower, not that there would have been many botanists around to record it since Johnston and Babington walked the moor a century before. John Brown of Berwick upon Tweed, who found the plant, had been a member of the Berwickshire Naturalists' Club since 1925. He was a 'diligent botanist' who sometimes accompanied J. B. Duncan, the eminent bryologist, in the field. He died in 1946.

Evans would have known *Orchis morio* well from Cambridgeshire, but it is not clear if he saw the specimens. Nevertheless I think

we should cast caution to the winds and rejoice that these two men shared such a treasure at the end of their days.

Evidence of Decline

An analysis of species that appear to have suffered a disproportionately severe decline since Evans's day reveals some interesting grouping of species.

The weed flora was changing. *Agrostemma githago*, Corncockle, and *Chrysanthemum segetum*, Corn Marigold, were already limited to a few particular fields, having formerly been widespread. *Centaurea cyanus*, Cornflower, was already a rare casual (it was found near Galashiels in 1910). We have now lost the first of these but the other two survive. *Scandix pecten-veneris*, Shepherd's-needle was still common, as is corroborated for Lauderdale by Andrew Kelly (1902). This is now apparently extinct in the area. *Aethusa cynapium*, Fools' Parsley, and *Veronica agrestis*, Field Speedwell, were already becoming uncommon in arable fields but remained prevalent in gardens. Today gardens are indeed almost their last refuge.

Evans was a champion of *Silene noctiflora*, Night-flowering Catchfly, which he believed was 'confounded constantly' with *Silene latifolia*, White Campion. He considered *S. noctiflora* to be widespread but very scarce. I have never recorded the plant in Berwickshire but am left wondering if I too have 'confounded' it, as George Swan (1993) still records it in North Northumberland, admittedly an area where sandy fields are more frequent. Then there are three species now associated with rocky outcrops: the common *Aphanes arvensis*, sensuo lato, Parsley Piert, and two rarer plants *Filago vulgaris*, Common Cudweed, and *Scleranthus annuus*, Annual Knawel. These were all considered by Evans to be locally common as weeds of arable fields on dry sandy ground. Indeed it is only the advent of winter cereals that seems to have caused a massive decline in *Aphanes arvensis* in the last twenty years as I remember it myself as a plentiful species of autumn stubbles. Now it is much less plentiful and the other two species no longer appear to occur as arable weeds. While herbicides must be considered a major reason for the decline of these weeds they are notably species of impoverished soils and it is likely that autumn ploughing, deeper cultivation and the increased use of nitrogenous fertilisers

have been more pervasive factors.

Herbs of dry grassland that have suffered a disproportionate decline since Evans's day include *Cerastium arvense*, Field Mouse-ear, *Cerastium semidecandrum*, Little Mouse-ear, *Cynoglossum officinale*, Hound's-tongue, *Daucus carota*, Wild Carrot, *Geranium pusillum*, Small-flowered Crane's-bill, *Hypericum humifusum*, Trailing St John's-wort, *Malva sylvestris*, Common Mallow, *Plantago media*, Hoary Plantain, *Silene vulgaris*, Bladder Campion, *Spergularia rubra*, Sand Spurrey, *Viola hirta*, Hairy Violet, and *Viola tricolor*, Wild Pansy.

One cannot be certain about the scale of the decline of all these species given not only the limitations of Evans's 'Flora' but also the different perspective of Evans growing up in Scremerston and then living in Cambridge, from my perspective living near Hawick and recording mainly in Berwickshire. There are more dry grassland habitats near Scremerston even today than in Berwickshire but as a class they have suffered from more intensive agriculture in much the same way as the arable weeds discussed above. In particular, grassland has been ploughed up and the headlands which long supported them have been ploughed more closely or have become eutrophicated by nitrogenous fertilisers.

The lack of sufficient detailed localities makes it difficult to assess trends in wetland species but it is clear that *Filipendula ulmaria*, Meadowsweet, is no longer as abundant in ditches as it once was and that *Apium nodiflorum*, Fool's Watercress, and *Rumex conglomeratus*, Clustered Dock, are approaching extinction as their habitat, the cattle plodged areas of lowland burns, has all but disappeared.

Moorland species that have declined include *Vaccinium myrtillus*, Bilberry, which is not nearly as prominent as it once was making berry gathering a rarity while *Genista anglica*, Petty Whin, and *Vaccinium vitis-idaea*, Cowberry, are severely reduced by a muirburn policy that leaves not even burnsides sacrosanct.

Specialist species that have declined include *Astragalus glycyphyllos*, Wild Liquorice, from dry scrub; *Crepis mollis*, Northern Hawk's-beard, from lightly grazed calcareous grassland; *Gentianella amarella* and *G. campestris*, Autumn and Field Gentian, from lightly grazed clifftops; *Geranium sylvaticum*, Wood Cranesbill, once abundant at wet wood margins; *Gnaphalium sylvaticum*,

Health Cudweed, from dry woodland glades; and *Platanthera bifolia* and *P. chlorantha*, Lesser and Greater Butterfly-orchid from unploughed meadows and heathland edges. Several of these species face extinction in the Tweed area.

In Conclusion

Arthur Evans remains the only man to have attempted a flora of the Tweed area and his endeavour is an example fo those of us today who struggle to record the plants in an area a fraction of that size. Despite its incomplete state and its many failings his 'Flora' stands as a milestone in our attempts to chronicle the drastic changes that man continues to inflict on the environment in which he lives and in our attempts to inspire others with our passion for wild flowers and their habitats. I urge you to find the time to visit the library of the Royal Botanic Garden, Edinburgh, and to dip into these pages which are now more happily filed under 'Evans'.

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THE FREIRIS OF BERWIK: A LATE MEDIAEVAL SCOTTISH 'MERRY TALE'

once attributed to William Dunbar (*c.* 1460 - *c.* 1520)

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T. S. Eliot, in *Notes towards the Definition of Culture* (1948) advocates an interplay between local, national and European culture. Remembering his statement made in the Preface to *For Lancelot Andrewes* (1928) that his critical standpoint was 'classicist in literature, royalist in politics and anglo-catholic in religion', one suspects a nostalgia for mediaeval conditions in his ideal for culture. Chaucer, with the French and Italian elements in his work may be said to be both English and European, while William Dunbar is indeed Scottish, but many of his themes and forms show Latin and French influences.

One humble manifestation of the mediaeval community of culture is the 'merry tale', in which a basic motif moving freely over Europe takes root in a particular locality and assimilates many local elements. Emmanuel Cosquin traces many popular stories to India; they reached Europe through the Moslem contacts with the Byzantine Empire, Italy and Spain: merchants and crusaders aided the propagation. In Europe they were disseminated by travelling scholars, friars (who used many as *exempla* in their sermons) and pilgrims. There was a common stock from which the poet could draw, elaborating a motif and giving it a local setting.[1]

The Freiris of Berwik provides a particularly fine instance of such a story crystallized in a local setting. There are many variants of the same motif found both before and after the Scottish poem. However, *The Freiris* is the best treatment; it has strong local roots and indeed is only slightly inferior to Chaucer's handling of fabliaux (merry tales of bourgeous life) while it provides an interesting comparison with his method. As the poem may be unfamiliar, it will be convenient to give a short summary of the plot to clarify discussion. I shall refer throughout to the edition found in *The Poems of William Dunbar*, edited by W. Mackay

Mackenzie (Edinburgh and London, 1932) pp. 182-95.

The opening consists of a description of the setting, Berwick upon Tweed (ll. 1-25). On a May morning two Jacobin or Dominican friars, Robert and Allane, set out from the town to visit their brethren in the country. In the evening they decide to look for lodging, as they fear the gates will be closed before they can return (ll. 26-48). They go to the house of an innkeeper, Symon Lawrear, who at the time happens to be away from home, but his wife Alesone provides bread, cheese and ale, over which they linger. The friary bell is heard; this means that the town gates are now shut, so the friars ask the woman for shelter for the night (ll. 49-80). After considerable hesitation as her husband is away, Alesone allows them to go into the loft. She then dresses in her best clothes and prepares a meal of capons and rabbits for a visit from her lover, Friar John, the Superior of the Greyfriars or Franciscans (ll. 81-146). Friar John arrives, bringing two bottles of Gascon wine, a brace of partridges and some fine bread. Meanwhile Friar Robert makes a small hole in the floor of the loft and watches the proceedings below (ll. 147-83).

As supper is beginning, Symone the husband unexpectedly knocks at the door. The food is hurriedly put in a cupboard; Friar John hides in a meal-trough, while Alesone retires to bed. At length she admits her husband and gives him a meagre meal. Symone expresses his wish that he had company at table, so Friar Robert coughs to reveal his presence. Both Friar Robert and Friar Allane are then invited down (ll. 184-295). Symone declares that he wishes the meal were better, so Friar Robert undertakes to provide good food by magic. After pretending to conjure, he tells Alesone to bring the good food out of the cupboard. She realises that the friars know her secret but feels obliged to join in the merry-making. Symone asks if he may see the ministering spirit who has brought the food and Friar Robert, pointing out that if the spirit were to appear in his proper shape his extreme ugliness would drive Symone mad, suggests that he choose a less frightening form which he undertakes to make the spirit assume. Symone asks that the spirit appear as a friar in Dominican garb like Friar Robert himself. However Robert replies that this would insult his order, but he will make the spirit appear as a Greyfriar. He orders the spirit to come forth from the meal-trough and Friar John, hoping

to escape, emerges among them. Encouraged by Friar Robert to strike at the 'evil spirit' Symone does so vigorously but in the process falls, breaking open his head. Friar John does manage to escape, but in his haste he misses a turn in the outside stair and falls into the mire. Ironically Symone remains none the wiser about his wife's intrigue (ll. 295-563).

Proceeding now to a critical analysis of the poem, which is written throughout in iambic pentameter rhyming couplets, we find that the opening panegyric on Berwick is largely conventional:

> At Tweidis mowth thair standis a nobill toun,
> Quhair mony lordis hes bene of grit renoune,
> Quhair mony a lady bene fair of face,
> And mony ane fresche lusty galland was
> In to this toun, the quhilk is callit Berwik (ll. 1-5)

However, it develops into a catalogue of the outstanding features of the town in the late fifteenth and early sixteenth centuries, about which time the poem appears to have been composed. This passage is well worth quoting from at some length:

> Upoun the sey their standis nane it lyk,
> For it is wallit weill about with stane,
> And dowbill stankis* castin mony ane; — double ditches
> And syne the castell is so strang and wicht* — sturdy
> With strait towris and turratis he *on hicht; — high
> The wallis wrocht craftely withall; . . . (ll. 6-11)
> . . . The grit croce kirk, and eik the Masone Dew*, — Maison Dieu
> The Jacobene freiris* of the quhyt hew, — Dominicans
> The Carmeleitis* and the Minouris* eik; — Franciscans; Order of
> The four ordouris wer nocht for to seik — Friars Minor
> They wer all in this toun dwelling. (ll. 21-5)

Although the account is somewhat idealised nevertheless the details are fairly accurate and could belong to an eye-witness account. The 'grit croce [cross] kirk' seems to be the old parish church of the Holy Trinity (the present building's predecessor); a drawing on the Elizabethan map of Berwick reproduced in Scott's well-known *History of Berwick* shows it as having a large cross on the roof at the east end. The Maison Dieu is the hospital of *Domus Dei* for lepers founded in the reign of Alexander III of Scotland. It stood near the old bridge over the Tweed and was sold, Scott informs us, in 1603 (p. 349). The four orders of friars were indeed

to be found in the town in the middle ages. There were the Dominicans, or Order of Friars Preachers, or Jacobins (so called from their early settlement in the Church of St Jacques (James) in Paris. Known also as Blackfriars, because they wore a black mantle over a white habit, they had a community in Berwick founded in 1230 by Alexander II of Scotland, their chapel being near the castle. In due course they acquired the chapel of Ravensdale (where Tintagel House now stands) from the Trinitarians. They were still in Berwick at the dissolution in 1539. There were also in Berwick the Franciscans or Friars Minor or Greyfriars, so-called from the colour of their habit. They were in Berwick by 1300 when Edward I of England granted them alms. Their house was probably where the Greens now is. They were still in Berwick at the dissolution in 1539. Also in Berwick were the Carmelites or White Friars (they wore a white mantle over a brown habit). They date from the 12th century when a crusader from Calabria, Berthold, and ten companions, established themselves as hermits near the cave of Elijah on Mount Carmel in the Holy Land. In 1240 hermits came to Europe from Mount Carmel and became mendicant friars. The order was founded in Berwick by Sir John Gray in 1297; the friars' duty was to officiate in the Chapel Royal in the castle. Their house was probably on the Ness, and they too were still in Berwick at the dissolution. The last of the 'four orders' was the Augustinians or Austin Friars. They date from 1250 when hermits living in central Italy were organised under the rule of St Augustine. In fact St Augustine did not write a rule as such but collegiate churches looking for a rule in the 11th century were able to draw one out of St Augustine's writings and formulate it. There were both canons regular and friars who followed this rule. There is little mention of Austin Friars in Berwick, although Scott is of the opinion that they had a house in the town. They had gone before the dissolution. For a time Berwick also housed the Trinitarians or 'crutched' friars, so called from their habit which was white with a red and blue cross on the breast. Their rule was that of St Augustine with added austerities. They were brought to Berwick by William the Lion, at first being granted an oratory in the Parish Church of the Holy Trinity, then having the Chapel of Ravensdale until the Dominicans took it over from them.

The author of *The Freiris of Berwik* is not known, although

Pinkerton attributes it to William Dunbar in his *Ancient Scottish Poems* (1786). Dunbar is not a narrative poet, whereas the author of *The Freiris* shows a distinct narrative gift. Thus it is unlikely that Dunbar is the author. Perhaps the poem was written by a cleric who chose a local setting known to him and used some local characters placing them in a fictitious situation. Certainly the characters are convincing and human. Although not elaborately drawn they are consistent and individual. The method of presentation of character is different from that of Chaucer in his comic tales, who gives at the outset detailed portraits of his characters, whereas the method of the author of *The Freiris* is to indicate briefly the characters as they appear and allow the portraits to develop out of the action. Thus the two Dominican friars are briefly presented:

> Thir silly* Freiris with wyffis weill cowld gluder*; good; flatter
> Rycht wondir weill plesit thai all wyffis
> And tawld thame tailis of holy sanctis lyffis,
> Quhill on a tyme thay purposit to pas hame.
> Bot verry tyrit and wett was Freir Allane,
> For he wes auld, and micht nocht wele travell,
> And als he had ane littill spyce of gravell;
> Freir Robert wes young and verry hett of blude,
> And be the way he bure both clothis and hude
> And all thair geir, for he wes strong and wicht*. (ll.33-41) sturdy

They relate to the general satire in mediaeval literature on friars and their wily ways, as in Langland's *Piers Plowman* or Chaucer's *Canterbury Tales* in the *Prologue* to which the Friar is drawn from the figure of False-Seeming or Hypocrisy in the *Romance of the Rose*. One might also instance John Heywood's early 16th century farce *The Pardoner and the Friar*. It is notable that Chaucer reserves idealisation for the poor parson, a secular priest. It is an unfortunate fact of history that the friars quickly fell from their initial high vocation and it is little wonder that writers were quick to satirize them. The friars in *The Freiris* are given some individuality. Old Friar Allane can be gallant with Alesone; at the beginning when she gives them food, he says:

> "Cum hiddir, deme, and sett yow doun me bye,
> And fill the cop agane anis to me." (ll. 70-1)

He joins with Friar Robert in the telling of many tales, but nevertheless throughout he is more quiet and elderly in manner

than his younger and more lively confrère. In answer to Alesone's objections about their staying overnight he plays upon his infirmity:

Than auld Freir Allane said, "Na, fair dame,
For Godis saik, heir me quhat I sall say,
In gud faith we will both be deid or day;
The way is evill, and I am tyrit and wett,
Our yettis ar closit that we may nocht in gett,
And to our abbay we can nocht win in;
To caus us perreis but* help ye haif grit syn; *without
Thairfoir of verry neid we mon byd still,
And us commit alhaill in to your will." (ll. 88-96)

Later in the tale, he knows that the choice food is hidden in the cupboard, yet sanctimoniously answers Symone's invitation in the strain of 'holy poverty':

Freir Allane said, "Schir, I pray God yow safe,
For heir is now annuch of Godis gud." (ll. 294-5)

The younger Friar Robert takes the initiative throughout. When in the loft, while:

Freir Allane lay doun as he best micht;
Freir Robert saud, "I hecht* to walk this nicht, *promise
Quha wait perchance sum sport I ma espy?" (ll. 113-15)

He takes considerable pleasure in his duping of Symone; having revived the goodman by allowing the wind to blow on his face, he offers ironic comfort:

"Lat be," quod he, "the werst is all away;
Mak mirry, man, and se ye murne na mair,
Ye haif him strikin quyt owttour the stair.
I saw him skip, gif I the suth can tell,
Doun our the stair, in till a myr he fell;
Bot lat him go, he wes a graceles gaist,
And boun yow to your bed, for it is best." (ll. 551-7)

Although before supper, Friar John the Greyfriar seems stalwart:

Lord God, gif than his curage wes aboif,
So prelat lyk sat he in to the chyre: (ll. 176-7)

his commanding presence being in an ironically different setting from his throne during Divine Office, at heart he is a coward. When Symone knocks at the door both he and Alesone are alarmed:

. . . Freir Johine wes in a fellone fray,
He stert up fast and wald haif bene away

Bott all for nocht, he micht no way win owt. (ll. 186-9)

Alesone is more angry than afraid:

The gudwyfe spak than, with a visage stowt,
"Yone is Symone that makis all this fray,
That I micht tholit full weill had bene away;
I sall him quyt*, and I leif half a yeir, pay him back
That cummert* hes us thus in sic maneir, distressed
Becaus for him we may nocht byd togidder ... (ll. 190-5)

However Friar John is helpless:

"Quhat sall I do, allace?" the Freir can say (l. 206)

He rushes to the door at the end of the poem when conjured out of the meal-trough:

With hevy cheir and drery countenance,
For nevir befoir him hapnit sic a chance. (ll. 520-1)

and his haste misses the turn in the outside stair, thus falling into the mire. He then makes off in great fear:

Yeit gat he up with clething nothing fair;
Full drerelie upoun his feit he stude,
And throw the myre full smertly than he yude,
And our the wall he clam richt haistely,
Quhilk round abowt wes laid with stanis dry:
Off his eschaping in hairt he wes full fane,
I trow he salbe laith to cum agane. (ll. 533-9)

In contrast Alesone is a much bolder character. She is able to deceive Symone; having removed the traces of the feast, she retires to bed, and after (maliciously one feels) allowing Symone to knock long unheeded, she pretends to think that the knocking is from someone requiring lodging, declaring that she cannot open the door because her husband is away:

Than Symone said, "Fair dame, ken ye nocht me?
I am your Symone and husband of this place."
"Ar ye my spous Symone?" scho sayis, "allace!
Be misknawlege I had almaist misgane,
Quha wenit that ye sa lait wald haif cum hame?" (ll. 230-4)

Although anxious when Friar Robert is conjuring, she can dissimulate when the food in the cupboard is revealed:

"Scho stert abak, as scho wer in a fray,
And sanyt* hir, and smyland cowd scho say, crossed herself
"Ha, banedicitie, quhat may this bene?
Quha evir afoir hes sic a fairly* sene? wonder
Sa grit a mervell as now hes apnit heir,

Quhat sall I say? He is ane haly Freir,
He said full suth of all that he did say." (ll. 360-6)

Finally she has spirit enough to join in the merrymaking of the feast when the food is retrieved from the cupboard:

Quhill at the last thay woix richt blyth ilk one . . . (l. 414)

Symone is kind-hearted, but easily duped. His generous praise of Friar Robert's conjuring is ironic in its context:

"He may be callit ane man of grit science,
Sa suddenly maid all this purviance
Hes brocht us heir, throw his grit subteltie
And throw his knawledge in filosophie:
In ane gud tyme it wes quhen he come hidder;
Now fill the cop that we ma drink togidder,
And mak gud cheir eftir this langsum day,
For I haif riddin ane woundir wilsome way.
Now God be lovit, heir is suffisance
Unto us all throw your gud govirnance" . . . (ll. 376-85)

Whereas much of Chaucer's humour and significance is found in his portraits the real strength of *The Freiris* lies in the vivid rendering of incident. The poet has the true narrative gift; the whole poem seems to take place before the reader's eyes – as in the love-making between Friar John and Alesone, which is depicted with humour and restraint:

Scho sayis, "Ye ar full hertly welcome heir
At ony tyme, quhen that ye list appeir."
With that scho smylit woundir lustely;
He thrisit hir hand againe richt prevely,
Than in hett luve thay talkit uderis till. (ll. 159-63)

Equally vivid is the account of the antics of Friar Robert when conjuring:

Than sat he doun, and kest abak his hude,
He granit, and he glowrit, as he wer woid*; mad
And quhylis still he satt in studeing,
And uthir quhylis upoun his buk reding;
And [quhylis] with baith his handis he wald clap,
And uthir quhylis walkd he glour and gaip;
Syne in the sowth he turnit him abowt
Weill thryis, and mair than lawly cowd he lowt*, bow
Quhen that he come neir the almery.

This with its animal high spirits is much nearer to the crude vigour of folk humour than to Chaucer's sophistication – one supposes

that he would have introduced some of the correct jargon of necromancy, as he uses the technical terms of alchemy in *The Canon Yeoman's Tale.*

Indeed throughout, the humour of *The Freiris* depends largely on situation and implications arising from the story itself. Thus Alesone's love-making is made more piquant because Friar Robert is watching through the hole in the ceiling:

> Scho rownis than ane pistill* in his eir; discourse
> Thus sport thame and makand melody . . . (ll. 178-9)

while Symone arrives inopportunely just as they are sitting down to supper. He wants company exactly when Alesone wishes him out of the way; she refuses to sit down with him:

> Said the gudwyf, "Devil inche cun* may I; taste
> It wer mair meit in to your bed to be,
> Than now to sit desyrand cumpany." (ll. 254-6)

When he desires the friars to come down he shows exasperating obstinacy:

> The gudwyf said, "I reid yow latt thame be,
> Thay had levir sleip not sit in cumpanye.
> The gudman said unto the maid thone,
> "Go, pray thame baith to cum till me annone." (ll. 275-8)

The friars come down with feigned innocence:

> Freir Robert said: "Now be sweit Sanct Jame,
> The gudman is verry welcome hame,
> And for his weilfair dulie do we pray;
> We sall anone cum doun to him, ye say."
> Then with that word thay start up baith attone,
> And doun the trop delyverly thay come . . . (ll. 281-6)

The humour here depends much on the fact that Friar Robert had coughed with the express purpose of being asked down and that Alesone's claim that they wished to sleep is so much further from the truth than she yet knows. The merry-making after the conjuring has added spice because Alesone at first has not the heart to join in:

> But scho drank with thame in to cumpany
> With fenyeit cheir, and hert full wo and hevy.
> Bot thay wer blyth annuche, God wait, and sang . . . (ll. 410-12)

Furthermore the reader remembers the misery of the cowardly Friar John under the meal-trough. He is curious to know if he will escape, and if Alesone's secret will be preserved. The *dénouement* is

lively and well-managed, the only fault being that there is no convincing reason why Symone should choose so conveniently that the ministering spirit should appear in the shape of a friar unless it be that the presence of the friars suggests this shape to him. However, if the poem were meant for recitation rather than reading, this would be less obvious. Certainly the technique suggests recitation, and the voice of the narrator:

> Now thus into the toun I leif him still
> Bydand his tyme; and turne agane I will
> To this fair wyfe, how scho the fyre cowld beit, . . . (ll. 129-31)

or:

> Thus at thair sport now will I leif thame still,
> And tell yow off thir silly* Freiris two *good
> Wer lokit in the loft amang the stro: . . . (ll. 164-6)

The summing up of the events at the end also suggests recitation:

> Thus Symonis heid upoun the stane wes brokin,
> And our the stair the Freir in myre hes loppin,
> And tap our taill he fyld wes woundir ill;
> And Alesone on na wayis gat hir will.
> This is the story that hapnit of that Freir,
> No moir thair is, bot Chryst us help most deir. (ll. 558-63)

The motif which has been elaborated by the poet and given a distinct local setting exists in many variants. It is instructive to examine briefly a few of these as they provide a measure of the skill of the Scottish poet and show the fertility of the motif. In his notes to the poem Mackenzie draws attention to some variants (p. 232). There is a Latin prose version in manuscripts of the 13th century. An early example in vernacular verse is the French fabliau *Le Pauvre Clerc*.[2] This is considerably shorter and clumsier than *The Freiris*. It tells of a scholar who is forced to leave Paris and return to his district because of poverty. Calling at the house of a peasant he is interviewed by the wife; she is of fierce countenance and refuses food or lodging because her husband is away, pleading that she would need his permission. A servant brings two casks of wine which the mistress hides. The servant prepares a cake which she has baked and puts some pork upon a plate. The scholar remonstrates in vain that here is some food which he could share. As he leaves a priest passes him without a word and goes into the house. While the scholar is wondering where to go the goodman

of the house comes up and cordially invites him to come back with him. As they knock the wife tells the priest to hide in the stable. While waiting for the servant girl to bake some bread, the goodman asks for a story. The scholar recounts his journey and by this means reveals the wife's secrets. While going through the wood that day he saw a large herd of swine; as the herdsman was not there, a wolf carried off a pig as big as that which the servant girl had just taken from the pot. The wife realises that prevarication is useless and admits that she has pork. The scholar then says that he saw the wolf eat a piece of pork with blood dripping from it as red as the wine which the servant girl brought when he was asking for lodging. The wife is angry, manages to say that she thinks of her husband more than she always reveals. The husband is delighted and the scholar continues that he found a stone to throw at the wolf as big as the cake which the servant girl has baked. Then comes the final disclosure: the wolf looked at the scholar just as did the priest hidden there in the stable. At this the priest rushes out; the husband seizes his hood and cloak and gives them to the scholar. In this poem there is no local colour; the first half of the story is somewhat awkward, while it lacks the advantage of keeping the wife's secret from her husband. The *dénouement* by means of a story is found in several folk tales as *Le Corbeau* noticed by Cosquin.[3] One might think that the *dénouement* in *The Freiris* by means of conjuring is original, but this too belongs to the common stock of folk narrative. A poem by Hans Rosenplütz, a 15th century Meistersinger of Nuremberg, *Der fahrenden Schüler* has an ending similar to that of *The Freiris*, while a *Fassnacht Spil* by Hans Sachs *Der farendt Schüler* (1551) elaborates the conjuring for the stage. In this the priest is forced to blacken himself with soot and put on a horse skin, bringing bread, meat and wine into a magic circle. The husband is dreadfully frightened, but notices that the 'devil' has buckles on his shoes and limps like the parish priest. The play is lively, but less finely wrought than *The Freiris*.

There are some later variants which illustrate the persistence of the motif. A chapter in the 16th century prose *Historie of Friar Bacon*, 'How Miles, Fryer Bacon's man did conjure for meat, and got meate for himself and his hoast' gives an Elizabethan version, the final passage of which is in helter-skelter colloquial prose:

> "I protest (said the goodman) your Devill is as like Goodman Stumpe the tooth-drawer, as a pomewater is like an apple: is it possible that your spirits can take other mens shapes: Ile teach this to keep his own shape," with that he beat the old man soundly, so that Miles was faine to take him off, and put the old man out of the door, so after some laughing, to bed they all went: but the woman could not sleepe for griefe, that her old lover had such bade waye for her sake.[4]

A Restoration variant is found in Edward Ravenscroft's comedy *The London Cuckolds* (1683).[5] The love making in this is much less innocently presented than in *The Freiris*:

> "Come madam, let us prepare ourselves with meat and wine, yet make but a hasty meal of it, that we may the sooner come to that more delicious banquet, the feast that Love has prepared for us, the feast of soul and senses, of all at once."

Loveday, a former suitor of Eugenia, disguised as a servant, does the conjuring; Ramble, the concealed gallant, comes out 'bows and retires'.

Allan Ramsay, an 18th century Scottish poet in his 'The Monk and the Miller's Wife'[6] appears to have imitated *The Freiris*. We know that he consulted the Ballantyne Manuscript for his *Evergreen* and although he does not acknowledge a debt there are marked resemblances between the two poems. In this case the story is set in Fife, the scholar being from St Andrews University. The style in places is a curious blend of colloquial Scots and 18th century English elegance:

> Now smiling muse, the prelude past,
> Smoothly relate a tale shall last
> As lang as Alps or Grampian hills,
> As lang as wind or water mills.

The love making although not directly presented is much more suggestive than in *The Freiris*:

> To lengthen out description here
> Wou'd but offend the modest ear
> And heet the lewder youthfu' flame
> That we by satire strive to tame.
> Suppose the wicked action o'er . . .

The dialogue is vigorous but ruder and coarser than in *The Freiris*:

> "Potage!" quoth Hab, "ye senseless tawpie!
> Think ye this youth's a gilly-gawpie;
> And that his gentle stamock's master,

To worry up a pint of plaister.
Like our mill knaves that lift the lading,
Whose kytes can streek out like new plaiding?"

When about to conjure the scholar declares that he is a Rosicrucian – many a spirit is not a devil – an 18th century anachronistic touch. The humour throughout is more consciously broad than that of *The Freiris*; it does not come as naturally to Ramsay:

Hab fidg'd and leugh, his elbuck clew,
Baith fear'd and fond a sp'rit to view:
At last his courage wan the day,
He to the Scholar's will gave way.

The scholar reassures the wife by a glance before the priest comes out, but the miller receives no injury as in *The Freiris*. The treatment is less dramatic than that in the mediaeval poem, while the fabliau situation of the intrigue of a bourgeois woman with a priest is less congenial to 18th century Scotland.

A final variant which I have come across is the play by John M. S. MacCabe, *The Friars of Berwick. Freely adapted from a poem attributed to William Dunbar* [1952]. In this Dame Alysoun is the mistress and Peggy her servant-lass. The husband is Simon Lawrie, a well-to-do farmer; Friar Allan and Friar Robert are Franciscan friars and Friar John is a wealthy Augustinian friar from Berwick. The style is broadly vernacular and there is vigorous farcical action. Friar Allan is lively not old, and is wearing a jester's hose. He and Friar Robert are sent to the byre to rest and observe the arrival of Friar John by looking over the top of the byre door. At the end Simon is beaten as are the friars who have revealed themselves as buskers of Holyrude. Alysoun is smacked!

In conclusion, although it cannot be claimed that *The Freiris* is a major poem, nevertheless it does show the use of a folk motif by a poet of considerable skill to produce a work which is lively and pleasurable. It is an example of the interplay of cultures which T. S. Eliot believes makes for good writing.

ACKNOWLEDGEMENTS

For the factual history of the friars in Berwick I have been much helped by John Scott, *Berwick-upon-Tweed. The History of the Town and Guild* (1888), 'Ecclesiastical History', pp. 332-74. Some years ago I was kindly given some very useful information by Mr F. M.

Cowe. Needless to say any inaccuracies in my account are entirely due to myself.

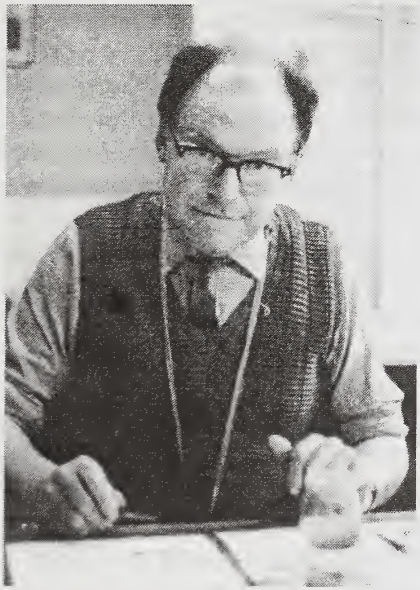
NOTES

1. See Emmanuel Cosquin, *Contes populaires de Lorraine comparés avec les contes des autres provences de France et des pays étrangers et précédés d'un essai sur l'origine et la propagation des contes populaires européens*, 2 vols (Paris, 1886); *Études folkloriques. Rescherches sur les migrations des contes populaires et leur point de départ* (Paris, 1922).
2. See A. de Montaiglon and G. Raynaud (eds), *Recueil général et complet des fabliaux des XIII^e^ et XIV^e^ siècles*, 6 vols (Paris, 1872-90), vol. 5, p. 192.
3. *Contes populaires de Lorraine*, etc., vol. 2, p. 329.
4. See William J. Thoms, *Early English Prose Romances*, new edn., revised and enlarged (n.d.), pp. 317-18.
5. Act II, scene ii. The text of this play may be found conveniently in A.J.M.A.M. (i.e. Montague) Summers, *Restoration Comedies* (1921).
6. *The Works of Allan Ramsay. With Life of the author by G. Chalmers; an essay on his genius and writing by Lord Woodhouselee, an appendix relating to his life and times*, 3 vols. (London, 1851) vol. 3, pp. 162-70. The line numbers are not marked.

OBITUARY

ALBERT LONG (1915-1999)

My father, Albert George Long, was born on 28th January 1915 at Inskip in Lancashire and died on 13th March 1999 in Berwick-upon-Tweed, aged 84. His father was Baptist Pastor at Inskip; in March 1919 the family moved to Todmorden in West Yorkshire where he received his education. It was at Todmorden where both his religious convictions and passionate interest in natural history, particularly entomology, developed, both of which were to become his guiding forces in life. The moors and wooded valleys around Todmorden, especially Hardcastle Crags, became his stamping ground. At the age of 14 he suffered a shooting accident which disabled his left foot, but he later considered this, like several other turning points in his life, to be an act of divine providence which led the way to a career in teaching and move to Berwickshire. At nearby Bacup in Lancashire he later met Gladys Hunt whom he subsequently married in 1942.



A. G. Long, 1972, taken by Jim Schopf in the Deputy Curator's Room, Hancock Museum, Newcastle upon Tyne.

He graduated in Botany at Manchester University in 1937, and commenced post-graduate work under Professor William H. Lang, a renowned palaeobotanist. This study was on the fossil plants of coal-balls which he collected from mine spoil around his home town. This was the start of his future palaeobotanical career. The ensuing Second World War, and the need for employment,

curtailed further academic research after gaining his MSc in 1938 and he undertook teacher training at University College, Hull during 1939-40. Temporary teaching posts at Lewes in Sussex then Leek in Staffordshire were followed by his successful appointment at the Berwickshire High School in Duns, where he commenced work in January 1945 just before his 30th birthday.

His career at Duns lasted 21 years where he was a highly respected and able teacher of biology. His greatest joy perhaps was when pupils developed an interest in natural history and shared moth-collecting or botanical outings. After a short stay in Duns, the family moved to Preston until 1949, then to a house on the village green in Gavinton where they remained until 1966. For a keen naturalist, Berwickshire seemed a wonderful place to have been guided to by Providence, and he wasted no time in taking up fly fishing, beekeeping, gardening, bird-ringing, botany and most of all entomology, soon making important new discoveries. These interests brought him into contact with other local naturalists, such as Grace and Ryle Elliot at Birgham and Colonel Logan Home at Edrom house, and then into the Berwickshire Naturalists' Club in 1955. His regular *Nature Notes* published in *The Scotsman* between 1951 and 1959 showed his breadth of interests and knowledge and above all his desire to communicate this to others.

These communication skills found a natural home in the Club's *History*, where he was soon contributing to, and for many years editing, the annual natural history reports, some 69 contributions between 1954 and 1996, particularly on botany, entomology and latterly on palaeobotany. Although his focus changed over the years, each new undertaking was embarked on with great energy and enthusiasm, for example beekeeping where he built up around one hundred hives and sold the honey to Melroses in Edinburgh. Purchase of a van and a portable generator facilitated many nocturnal moth-collecting trips to all corners of the county. He soon gained an intimate knowledge of Berwickshire's wild places, among his favourites were Kyles Hill, Elba and the Retreat oakwoods, Gordon Moss and Langtonlees Cleugh.

In 1957 he received a letter from Dr Peter Barnard, of Birkbeck College in London, a young palaeobotanist who knew of Albert's early fossil research, and managed to track him down in Gavinton near where, he explained, petrified calciferous sandstone plants

had earlier been found. These were soon refound which stimulated a dramatic change of focus: scouring the Langton Burn, the Whiteadder Water and the Berwickshire coast for petrified plant remains. From then on, until 1980, he made a steady stream of remarkable discoveries of new fossil plants on his doorstep, which gained him international repute as a distinguished scientist, for example at the Tenth International Botanical Congress in Edinburgh in 1964, where he brought palaeobotanists from all over the world to Cove Harbour to demonstrate his discoveries. His work focused on Pteridosperms, the now extinct 'Seed-Ferns' where his researches gradually revealed the first known evolution of seeds. He was convinced of a link between these Carboniferous seeds and modern seed-plants, but with characteristic caution he was never able to prove this link. However, the numerous unique new genera and species he discovered, several of them honouring Berwickshire place names, such as *Stamnostoma huttonense*, *Deltasperma fouldenense* and *Eccroustosperma langtonense*, were described in the Transactions of the Royal Society of Edinburgh, to which society he was elected as a Fellow in 1962.

Because of the dominance of his interest in fossil plants, other interests were scaled down, but never lost. In 1960 he hosted a meeting of the Botanical Society of the British Isles in Duns, which acted as a local stimulus to recording of plants. He had a strong historical perspective on natural history of the Borders, with a great respect for the early naturalists such as George Johnston and James Hardy. A lesser-known naturalist he admired was Thomas Ovens of Foulden (commemorated in *Tristichia ovensi*) who died at the age of twenty, yet made important discoveries of fossil fish and plant beds at Foulden. He also enjoyed tracking down long-lost records of plants and insects, for example leading excursions of the Berwickshire Naturalists' Club to search for *Saxifraga hirculus* at Kettleshiel (unsuccessful) and *Linnaea borealis* at Mellerstain (successful). Although he was never an active 'conservationist' in the modern sense, his historical perspective made him saddened by the continuing destruction of former wonderful Berwickshire habitats, particularly ancient woodlands such as Bonkyl Wood and Flass Old Wood.

His career at the High School in Duns ended in 1966, when frustration over the lack of recognition of biological sciences as a

subject in its own right, and the consequent lack of career prospects in education, drove him to seek employment elsewhere. His by now international reputation enabled him, through the support of Professor John Burnett of Newcastle University, to move to the Hancock Museum in Newcastle to pursue his palaeobotanical researches until retirement. The move away from Berwickshire was painful, but regular visits north softened the blow. In 1972 he served as President of the Berwickshire Naturalists' Club, and delivered a Presidential address on 'The Early History of Seeds'. In 1966 he was awarded a DSc at Manchester, and a year later an honorary LLD at Glasgow University.

Following retirement in 1980, he moved north to Berwick upon Tweed, though his health waned and curtailed his mobility and research. Later a stroke severely disabled him and during his final years in Tweedmouth House he concentrated on writing his memoirs, *Hitherto*, published by Pentland Press in 1996. However, even in his final years he maintained his interest in natural history, and in his final contributions to the *History* reverted to entomological records from Tweedmouth.

David G. Long

JANET COWE
A courageous and very talented lady

Janet joined the Club in 1991, and was almost immediately appointed to the office of Editing Secretary, which she held with distinction for four years. The fact that she was herself an author no doubt helped greatly, on the 'poacher turned gamekeeper' principle, and she had an excellent rapport with our printer because she recognised his problems.

In 1995, when Brian Cato relinquished the office of Corresponding Secretary, Janet took over with consummate skill and meticulous attention to detail, given visible shape in her immaculate hand written minutes.

She was a tower of strength to any incoming President. For most of us that is a rather daunting office, and a smooth-running 'back office' makes a world of difference. Janet knew everybody, and although not a long-standing member of the Club, she appeared to be familiar with the minutiae of its operation right back to its inception. It was sad that we were not able to have the benefit of this expertise for longer.

Although one was always aware of her great contribution, the true measure of it only became apparent when she was forced to give up the office. It was no secret that she had been treated – seemingly successfully – for lung cancer a few years before, but when it returned she was very anxious that this should not be generally known, for family reasons, and so the search for a successor was a delicate matter. In the end, she was forced to resign before one was found, and the burden she had carried became very apparent to me when I had it *pro tem*. Her illness was faced with courage that was an example to us all.

An historian in the best tradition, and particularly in relation to her adopted Borough of Berwick upon Tweed, she could bring history alive, not just place it in a time-scale – a skill to be envied by all of us who do not possess it. It came as a surprise to learn that her early professional life was spent in accountancy, but no surprise that she left that calling to pursue her other interests.

Janet was devoted to her family, to whom the sympathy of the Club is extended in great measure. There can have been few people

since our Founder who carried the cares of office throughout their membership, as Janet did. We remember her with affection and with gratitude.

Peter Johnson

FIELD NOTES AND RECORDS – 1999

BOTANICAL RECORDS

D. G. Long
Spottiswoode House, Gordon, Berwickshire TD3 6NQ

Bryophytes

All records were made during 1999. Botanical nomenclature follows Blockeel & Long, *Check-list and Census Catalogue of British and Irish Bryophytes* (1998); common names follow Edwards, *English Names for British Bryophytes* (1997).

Mosses

Bryum capillare var. *rufifolium*. CAPILLARY THREAD-MOSS. Basaltic rock outcrop, north side of Hume Castle NT7041, 1 April, D. G. Long. New to vc81 and Scottish Borders.

Fissidens gracilifolius. NARROW-LEAVED POCKET-MOSS. Sandstone rock face, Dunglass Dean NT7671, 9 November, D. G. Long. New to vc81 and Scottish Borders.

Schistidium pruinosum. MEALY GRIMMIA. Dry rocks on steep wooded river bank, Gateheugh NT5934, 1 April, D. G. Long. New to vc81 and Scottish Borders; at present known from only five other British vice-counties.

Thuidium philibertii. PHILIBERT'S TAMARISK-MOSS. Calcareous grassland, NW end of Hume Castle NT7041, 1 April, D. G. Long. Third record for vc81.

Ulota drummondii. DRUMMOND'S PINCUSHION. On fallen oak by Otter Burn, Elba, NT7860, 10 May, D. G. Long. Third extant site in vc81 for this ancient woodland species.

Zygodon conoideus. LESSER YOKE-MOSS. On *Sambucus*, Otter Burn, Elba NT7860, 10 May, D. G. Long. Third record for vc81.

Liverworts

Frullania fragilifolia. SPOTTY SCALEWORT. Rock face on steep wooded river bank, by coppermines, Elba NT7860, 10 May, D. G. Long. One of only two Berwickshire sites, last recorded here in 1926.

Reboulia hemisphaerica. HEMISPHERIC LIVERWORT. Shady rock ledges on steep wooded river bank, by coppermines, Elba NT7860, 10 May, D. G. Long. Confirmation of 1963 record.

Vascular Plants

Nomenclature follows Kent, *List of Vascular Plants of the British Isles* (1992) except where indicated. All are field records made during 1999 except where otherwise indicated; * refers to an introduction. The status of introductions is classified as Established, Surviving, Casual or Planted.

Alchemilla glaucescens. GLAUCESCENT LADY'S-MANTLE. Limestone grassland, Hilton Bay NT9659, 18 September, M. E. Braithwaite det. Dr S. M. Walters. Perhaps 500 plants. Dr Walters and Mr P. S. Lusby consider that this population differs slightly in the leaf teeth from that near Oldcastles NT8558, about 100 plants (1998) which is now also considered native. Only records for south Scotland.

**Atriplex littoralis*. GRASS-LEAVED ORACHE. Road verge, turning to Edington NT8956, 12 June, M. E. Braithwaite. 2nd record for vc81. Later recorded also NT83, NT64, NT95, M. E. Braithwaite and L. Gaskell. Established.

**Borago officinalis*. BORAGE. Arable edge, Burnmouth Hill NT9561, 27 September, M. E. Braithwaite. Borage had been grown as a crop in this field in 1998. Recorded also NT5934, L. Gaskell and NT9362, M. E. Braithwaite. Casual. First records for vc81 since 1893.

**Bromus hordeaceus 'longipedicellatus'*. A BROME GRASS. Arable edge, Burnmouth Hill NT9561, 27 September, M. E. Braithwaite, det. L. M. Spalton. First record for vc81 of a distinctive taxon that awaits formal description. Status uncertain. Several plants.

Carex laevigata. SMOOTH-STALKED SEDGE. Flushed grassland, near Birkie Wood NT5749, 11 June, M. E. & P. F. Braithwaite. Flush, Blackburnrig Dean NT7965, 4 September, M. E. Braithwaite. Second and third extant records for vc81. Plentiful near Birkie Wood.

Carex pendula. PENDULOUS SEDGE. Undercliff between Tods Loup and English Border NT9759, 5 June, P. F. Braithwaite & BSBI party. Frequent and plentiful. Known here since 1807, Thompson, but almost inaccessible.

**Datura stramonium*. THORN-APPLE. Garden, Coldingham NT9066, 9 September, A. R. Jermyn. Second record for vc81. Casual. Had self-sown for 3 years. A most poisonous plant.

**Erinus alpinus*. FAIRY FOXGLOVE. Sandstone rock-face, A68 near Chapel South Lodge NT5641, 5 June 1998, L. Gaskell. First record for vc81 from semi-natural habitat. Large colony. Established.

**Erysimum cheiranthoides*. TREACLE MUSTARD. Turnip field near Gledswood East Lodge NT5935, August, L. Gaskell. Second extant record for vc81. Established.

**Euphorbia dulcis*. SWEET SPURGE. Roadside, near Whitehouse NT6333, 4 May, L. Gaskell. First record for vc81. Established.

Festuca ovina ssp. *ophioliticola*. SHEEP'S FESCUE. Calcareous grassland, Foulden Dean NT9254, 29 June, M. E. Braithwaite. First record for vc81 of this calcicole subspecies.

Fumaria purpurea. PURPLE RAMPING-FUMITORY. Set-aside near Lurgie Craigs NT6739, 6740, 19 June, M. E. Braithwaite & L. Gaskell. Second record for vc81. Plentiful.

Juncus x *kern-reichgeltii*. A HYBRID RUSH. Moss, Lurgie Loch NT6739, 19 June, M. E. Braithwaite & L. Gaskell. First record for vc81. With both parents, *J. effusus* and *J. conglomeratus*.

**Lathyrus latifolius*. BROAD-LEAVED EVERLASTING-PEA. Bank near Edrington Castle NT9353, 23 August, M. E. Braithwaite. First record for vc81. Established.

Leontodon saxatilis. LESSER HAWKBIT. Limestone grassland, Hilton Bay NT9659, 18 September, M. E. Braithwaite. Limestone grassland, Burnmouth Hill NT9561, 27 September, M. E. Braithwaite. Second record for vc81 as native; first record, 1970, Burnmouth, verified.

**Lilium pyrenaicum*. PYRENEAN LILY. Wood near Halidean Mill Moss NT5934, 27 July, L. Gaskell & K. Velander. Second record for vc81. Established.

**Luzula luzuloides*. WHITE WOOD-RUSH. Policy woodland, Anton's Hill NT7843, 29 May, M. E. Braithwaite. Third extant record for vc81. Established.

**Oenothera biennis*. COMMON EVENING-PRIMROSE. Road verge, A68 near Chapel on Leader NT5641, 27 August, L. Gaskell. First record for vcc81. Casual.

Papaver dubium ssp. *lecoqii*. YELLOW-JUICED POPPY. Waste ground, Foulden Village NT9255, 12 June, M. E. Braithwaite. Arable edge, Paxton North Mains NT9353, 5 June, M. E. Braithwaite & BSBI party. Perhaps native in this neighbourhood.

[*Polygonatum odoratum*. ANGULAR SOLOMON'S SEAL. Craigswalls Wood, Edrom NT8455, 1871, Dr C. Stuart, *HBNC* 6:283; *HBNC* 7:19. Apparently an error. There is a specimen in Captain F. M. Norman's herbarium from this locality dated 25 May 1878 which is *Polygonatum multiflorum*.]

Potamogeton obtusifolius. BLUNT-LEAVED PONDWEED. Pond, Cranshaws NT6861, 2 July 1997, J. J. Day. Second extant record for vc81.

Sanguisorba minor ssp. *minor*. SALAD BURNET. Limestone grassland, Hilton Bay NT9659, 18 September, M. E. Braithwaite. Second extant record for vc81. Strong colonies.

**Sasa palmata*. BROAD-LEAVED BAMBOO. Damp woodland glade, Newton Don NT7136, 9 October, M. E. Braithwaite. First record for vc81. Extensively established.

**Sedum rupestre*. REFLEXED STONECROP. Rocks by river opposite Old Melrose NT5833, 13 August, L. Gaskell. Second record for vc81. Established.

**Sempervivum tectorum*. HOUSE-LEEK. Garden wall of abandoned farmhouse, Laverock Braes NT8567, 24 July, M. E. Braithwaite. Only recent evidence of a once familiar plant.

**Sinarundinaria anceps*. INDIAN FOUNTAIN-BAMBOO. Damp woodland glade, Newton Don NT7136, 9 October, M. E. Braithwaite. First record for vc81. Strongly established.

**Spiraea* x *rosalba*. INTERMEDIATE BRIDEWORT. Policy woodland by Hen Poo, Duns Castle NT7755, 27 September, M. E. Braithwaite. First record for vc81. Established.

**Trachystemon orientalis*. ABRAHAM-ISAAC-JACOB. Wooded bank, Paxton Burn NT9352, 1 May, M. E. & P. F. Braithwaite. Second record for vc81. Established in several places.

Trichophorum cespitosum nothosubsp. *foersteri* G. A. Swan. SWAN'S DEERGRASS. Raised bog, Long Moss NT8568, 24 July, M. E. Braithwaite. First record for vc81 of this recently described taxon.

**Trichophorum cespitosum* ssp. *germanicum*. COMMON DEERGRASS. Heather moorland, Long Moss NT8568, 24 July, M. E. Braithwaite. Recorded also near Lammerlaw Burn NT5260, 7 August, M. E. Braithwaite. Confirmation that the deergrass widespread in vc81 is this taxon.

Ulex gallii. WESTERN GORSE. Road verge adjacent to former moorland, near Middlethird NT6843, 18 September, M. E. Braithwaite. Only extant record for vc81. Four bushes.

Birds at St Abbs Head in 1999

K. J. Rideout

All records refer to the NNR unless otherwise stated

RED THROATED DIVER, *Gavia stellata*. 10 S on 19/9. (very little seawatching done this year)

GREAT NORTHERN DIVER, *Gavia immer*. No records.

LITTLE GREBE, *Tachybaptus ruficollis*. First one on 29/3 rising to 4 by 7/4. 2 pairs nested but only 1 young seen. 2 on 8/11 was last record for the year.
Millars Moss - singles on 11/2 and 11/9.

FULMAR, *Fulmarus glacialis*. Population count = 278 apparently occupied sites. First egg on 2/6. First chick on 8/7. Only 15 young fledged from the entire colony.

SOOTY SHEARWATER, *Puffinus griseus*. One on 5/9 was the only record.

MANX SHEARWATER, *Puffinus puffinus*.

May - 20 N on 27th, 17 N on 29th; 4 N on 2/6; Aug - 4 S on 18th, 5 S on 19th (very little seawatching done this year).

STORM PETREL, *Hydrobates pelagicus*. 24/7 - 8 tape lured during the night at Black Gable; 8/8 - 1 tape lured.

GANNET, *Morus bassanus*. Seen frequently in most months with peak count of 870 per hour on 27/6.

CORMORANT, *Phalacrocorax carbo*. Seen most months, flying past in small numbers. On Mire Loch, singles occasionally recorded Jan - May. 12 roosted on White Heugh on 19/1.

SHAG, *Phalacrocorax aristotelis.* A total of 165 apparently occupied nests with mean productivity of 0.79 young fledged per active nest. First egg on 19/4; first chicks on 27/5.

GREY HERON, *Ardea cinerea.* 1 - 2 occasionally during year with 3 in July.

MUTE SWAN, *Cygnus olor.* Pair at Mire Loch on 19/1 (white TPO/white UNJ) and then from 9/4 with nest - building soon after. Eggs had been laid by 22/4 but the nest with eggs still present was deserted on 1/5. A new pair was seen on 13/5 but did not stay (green AXU/white XHT). Another pair, also previously seen on 28/4, appeared again on 26/5 (last year's female, white NCA + male with metal ring only) and went on to breed, hatching 4 cygnets on 8/7. 2 cygnets had died by 11/8 and the family of four remained until 8/11. 2 adults only were present on 10/11, 12/11, 26/11 and 19/12 but their identity was not determined.

At Millars Moss, the family of 4 from 1998 remained until 18/2 with the two adults (white KPZ/white PCP) returning alone on 25/2. These had built a nest by 1/4 and hatched 8 cygnets on 27/5 but as with 1998, survival was poor and only two cygnets were left by 30/9 though these remained to the year end. (5 cygnets were ringed on 28/8 but white 079 was found dead on 31/8, 078 on 21/9 and 081 on 29/9).

A pair was on the sea at Pettico Wick on 24/9 (blue 9PL/white?).

WHOOPER SWAN, *Cygnus cygnus.* Oct - 4 S on 5th, 8 W on 17th and 2 S on 24th.

PINK FOOTED GOOSE, *Anser brachyrhynchus.* Mar - 83 N on 11th, 91 N on 31st; Apr - 17 E on 1st; Oct - 80 S on 14th, 120 N on 24th, 300 W on 27th.

GREYLAG GOOSE, *Anser anser.* Apr - female laid egg on raft at Mire Loch after pairing with a Canada Goose but deserted (this pair apparently bred successfully at Lumsdaine pond and adults plus 4 hybrids seen around Northfield in Dec). 7/10 21 S.

CANADA GOOSE, *Branta canadensis.* June - 47 N on 4th, 32 on sea on 5th.(see also entry for Greylag).

BARNACLE GOOSE, *Branta leucopsis.* 5/10 25 S.

BRENT GOOSE, *Branta bernicla.* No records in 1999.

SHELDUCK, *Tadorna tadorna.* 13/5 3 N; 25/8 5 S.

WIGEON, *Anas penelope.* Mire Loch - unusually regular with 1 - 2 Sep/Oct, up to 7 in Nov and 8 in Dec.

Millars Moss - unusually scarce. Max 6 in Feb. 1 in Nov was only other record.

GADWALL, *Anas strepera.* 21/4 Pair at ML also at MM on same day.

TEAL, *Anas crecca.* Mire Loch - 8/5 1; 11/8 5; 16/9 2; 12/11 2.

Millars Moss - peak counts were 28 on 19/1, 28 on 10/2, 19 on 3/3, 3 on 28/4, 2 on 16/9, 4 on 8/10, 9 on 26/11, 17 on 19/12.

MALLARD, *Anas platyrhynchos.* Mire Loch - 1 pair fledged 2 young. Peak counts were 33 on 19/1, 32 on 11/2, 20 on 10/3, 9 on 1st Apr, 19 on 11/8, 32 on 3/11, 21 on 19/12.

Millars Moss - Three broods seen. Peak counts were 6 on 12/1, 10 on 3/2, 12 on 17/3, 13 on 1st Apr, 9 on 13/5, 3 on 19/12.

PINTAIL, *Anas acuta.* 19/12 1 MM.

GARGANEY, *Anas querquedula.* 27/4 1 male at Mire Loch.

SHOVELER, *Anas clypeata.* Apr - pair at MM on 15th, 1 ML on 27th.

RED CRESTED POCHARD, *Netta rufina.* A female, probably originating from Northfield, was at Mire Loch on 3/2 and 29/5.

POCHARD, *Aythya ferina.* Millars Moss - 1 to 4 on 5 dates between 5/1 and 25/2.

TUFTED DUCK, *Aythya fuligula.* Mire Loch - peak counts were 7 on 19/1, 25 on 18/2, 24 on 10/3, 18 on 1st Apr, 2 on 7/6, 23 on 16/9, 42 on 8/10, 27 on 3/11, 18 on 19/12.

Millars Moss - peak counts were 6 on 19/1, 7 on 18/2, 8 on 17/3, 21 on 28/4, 4 on 16/9, 5 on 26/11, 1 on 19/12.

SCAUP, *Aythya marila.* 16/9 1MM.

EIDER, *Somateria mollissima.* May - failed nest by East Hurkur. Peak counts offshore were 454 on 7/1, 351 on 3/2, 146 on 3/3, 61 on 7/4, 157 on 13/10.

LONG TAILED DUCK, *Clangula hyemalis.* No records in 1999.

COMMON SCOTER , *Melanitta nigra.* 2/6 5 N; Aug - 40 N on 13th, 18 S, 12 N on 18th. Few records due to lack of observer effort.

VELVET SCOTER , *Melanitta fusca.* No records in 1999.

GOLDENEYE, *Bucephala clangula.* Mire Loch - peak counts were 3 on

19/1, 12 on 25/2, 9 on 3/3, 3 on 1st Apr, 2 on 8/5, 3 on 22/10, 2 on 8/11, 1 on 19/12.

Millars Moss - peak counts were 1 on 19/1, 4 on 18/2, 4 on 10/3, 1 on 21/4, 2 on 26/11, 6 on 19/12.

RED-BREASTED MERGANSER, *Mergus serrator.* 1/7 4 N. 19/12 1 ML.

GOOSANDER, *Mergus merganser.* Mire Loch - Exceptionally high numbers in early part of year. Peak counts were 16 on 19/1 (a site record), 13 on 3/2, 9 on 3/3, 1 on 1st Apr, 2 on 19/9, 1 on 20/11, 1 on 8/12.

SPARROWHAWK, *Accipiter nisus.* Singles recorded in most months. Pair probably bred near Ranger's Cottage.

BUZZARD, *Buteo buteo.* Singles on 11/3 and 7/9.

OSPREY, *Pandion haliaetus.* One on 21/9.

KESTREL, *Falco tinnunculus.* Singles recorded in Jan, Mar, May, Jun, Jul, Sep and Oct.

MERLIN, *Falco columbarius.* Singles on 5/1 and 26/8.

PEREGRINE, *Falco peregrinus.* Singles seen on 3 dates in Jan and 3 dates in Mar. Pair present near White Heugh from early April with nest found on 15/4. One chick fledged on 21/6. 1 - 2 seen regularly Jul - Sep. 1 on 22/10.

GREY PARTRIDGE, *Perdix perdix.* No records in 1999.

QUAIL, *Coturnix coturnix.* At Northfield, single on 4/7.

PHEASANT, *Phasianus colchicus.* Female with 6 chicks at Mire Loch on 1/6.

WATER RAIL, *Rallus aquaticus.* 1 - 2 heard at Mire Loch on 10 dates Jan to Mar and 1 - 3 on 14 dates Sep to Dec.

MOORHEN, *Gallinula chloropus.* Mire Loch - Singles in Jan and Mar. One pair nested raising one young. 1 - 3 in Oct and Nov.

Millars Moss - Peak counts were 6 in Jan, 4 in Feb, 7 in Mar, 5 in Apr, 2 in Sep, Oct and Nov. At least one pair nested.

COOT, *Fulica atra.* Mire Loch 2 pairs nested raising 1 young. Peak counts were 2 in Jan, 1 in Feb, 4 in Mar, 4 in Apr, 8 in Aug, 7 in Sep and Oct, 8 in Nov, 6 in Dec.

Millars Moss - at least 2 pairs nested. Peak counts were 14 in Jan, 22 in Feb, 17 in Mar and Apr, 9 in May, 10 in Sep, 5 in Oct, 7 in Nov, 6 in Dec.

CRANE, *Grus grus.* One flew south on 6/9 (reported by a visitor, corroborated by a sighting at West Loch).

OYSTERCATCHER, *Haematopus ostralegus.* Recorded in most months, usually 1 - 4 birds, max. 7 on 13/1. Pair nested at Millars Moss.

GOLDEN PLOVER, *Pluvialis apricaria.* 1 on 22/8.

GREY PLOVER, *Pluvialis squatarola.* 2 S on 7/8; 1 at Pettico Wick 20 - 21/9.

LAPWING, *Vanellus vanellus.* No records in 1999.

PURPLE SANDPIPER, *Calidris maritima.* 1 on 18/2; 4 on 22/10.

DUNLIN, *Calidris alpina.* 2 Nf on 21/9.

JACK SNIPE, *Lymnocryptes minimus.* 1 Nf 21/9; 1 Mire Loch 19/12.

SNIPE, *Gallinago gallinago.* Singles Nf on 12/1 and 1st Apr.

WOODCOCK, *Scolopax rusticola.* 12/1 2; 15/2 1; Oct - 1 on 18th, 2 on 21st. 2 Nf 13/11.

BLACK - TAILED GODWIT, *Limosa limosa.* 1 MM 27/4.

BAR - TAILED GODWIT, *Limosa lapponica.* 1 Nf 22 - 23/9.

WHIMBREL, *Numenius phaeopus.* May - 12 N on 8th, 2 N on 9th; 1 - 4 on 10 dates between 28/7 and 22/9.

CURLEW, *Numenius arquata.* Recorded in most months, mostly Northfield, usually 1 - 10 birds but 14 on 10/3 and 15 on 23/8.

REDSHANK, *Tringa totanus.* 1 - 4 most months but 12 on 10/4.

GREENSHANK, *Tringa nebularia.* At Millars Moss, single on 8 - 9/5. 2 S on 31/8, 1 S on 9/9.

GREEN SANDPIPER, *Tringa ochropus.* Singles at Mire Loch on 18/4, 22/8 and 11/9. 1 MM on 24/8.

COMMON SANDPIPER, *Actitis hypoleucos.* Singles at Mire Loch 30/4, 7/5, 1/7. 1 on shore 20/7, 2 ML 16/9.

At Millars Moss, 1 on 16/9.

TURNSTONE, *Arenaria interpres.* No records in 1999.

POMARINE SKUA, *Stercorarius pomarinus.* 1 on 27/8 was the only record.

ARCTIC SKUA, *Stercorarius parasiticus.* 28/7 1 S; Aug - singles S on 18th and 19th; 19/9 4 S (few records due to low observer effort).

GREAT SKUA, *Stercorarius skua.* Aug - 3 N on 18th, 3 N on 19th and 1 N on 21st (few records due to low observer effort).

LITTLE GULL, *Larus minutus.* Aug - single on 14th, 2 on 27th.

BLACK-HEADED GULL, *Larus ridibundus.* No significant counts in 1999.

LESSER BLACK-BACKED GULL, *Larus fuscus.* No nests located. 1 - 2 occasional Apr - Jul.

HERRING GULL, *Larus argentatus.* 253 apparently occupied nests with first chicks seen on 4/6. 23/1 299 St Abbs to Pettico Wick.

GREAT BLACK-BACKED GULL, *Larus marinus.* Pair nested on Wuddy Rocks but unsuccessful - first breeding record for the NNR. 23/1 17 St Abbs to Pettico Wick.

KITTIWAKE, *Rissa tridactyla.* First birds on ledges on 16/3. 9,576 apparently occupied nests with mean productivity of 0.6 young per AON. First egg on 19/5, chick on 16/6, fledgling on 23/7.

SANDWICH TERN, *Sterna sandvicensis.* Small numbers Jun - Jul.

COMMON TERN, *Sterna hirund.* 1 feeding in Starney Bay, 15/6.

GUILLEMOT, *Uria aalge.* Birds occasionally on ledges in Jan and Mar but unusually long period of absence in mid - Apr (6 days). Numbers on monitoring plots decreased by 12% compared to 1998. First known egg on 9/5, chick on 5/6, fledgling on 24/6. Occasional attendance at colony from mid - Oct to Dec.

RAZORBILL, *Alca torda.* Some birds on ledges on 3/3. Numbers on monitoring plots decreased by 6.7% compared to 1998.

LITTLE AUK, *Alle alle.* No records in 1999.

PUFFIN, *Fratercula arctica.* First birds on cliffs on 31/3. Peak June count was 60 ashore on 24th.

STOCK DOVE, *Columba oenas.* 28/4 1 at Blackpotts.

WOODPIGEON, *Columba palumbus.* 6 breeding territories.

COLLARED DOVE, *Streptopelia decaocto.* Present around Northfield in most months.

CUCKOO, *Cuculus canorus.* Single on 9th and 10th May.

TAWNY OWL, *Strix aluco.* 17/10 1 at ML. Regularly heard at Ranger's Cottage.

LONG-EARED OWL, *Asio otus.* Singles on 21/4 and 29/5.

SHORT-EARED OWL, *Asio flammeus.* No records in 1999.

SWIFT, *Apus apus.* First record on 8/5 but no significant counts. Last record was 1 on 17/9.

KINGFISHER, *Alcedo atthis*. No records in 1999.

HOOPOE, *Upupa epops*. Single from 12th to 21st Sep.

WRYNECK, *Jynx torquilla*. Single from 6th to 10th May.

GREEN WOODPECKER, *Picus viridis*. 1 at Mire Loch on 5 dates between 21/8 and 11/9.

GREAT SPOTTED WOODPECKER, *Dendrocopos major*. Single at Mire Loch on 26/9. Occasional at Northfield.

SKYLARK, *Alauda arvensis*. At Nf, 47 on 12/1, 29 on 18/2. No breeding territories on NNR though 3 singing over Blackpotts on 28/4. C. 200 W on 17/10.

SAND MARTIN, *Riparia riparia*. First 1 on 27/4 but no significant counts.

SWALLOW, *Hirundo rustica*. First seen on 9/4; peak count was 15 at Mire Loch on 30/7. One pair bred at boathouse.

HOUSE MARTIN, *Delichon urbica*. First 1 on 28/4 but no significant counts.

TREE PIPIT, *Anthus trivialis*. 2 on 27/4; May - 1 on 7th, 4 on 8th; Sep - 2 on 21st, 1 on 24th.

MEADOW PIPIT, *Anthus pratensis*. One breeding territory plus another that overlapped NNR boundary. Peak count was c. 100 on 18/9.

ROCK PIPIT, *Anthus petrosus*. Ten breeding territories plus two overlapping NNR boundary.

YELLOW WAGTAIL, *Motacilla flava*. No records in 1999.

GREY WAGTAIL, *Motacilla cinerea*. Occasional singles Apr, May, Aug, Sep and Nov.

PIED WAGTAIL, *Motacilla alba*. Four breeding territories.

WAXWING, *Bombycilla garrulus*. 1 on 20/10.

WREN, *Troglodytes troglodytes*. Eleven breeding territories. 24 ringed during CES. 20 on 23/10.

DUNNOCK, *Prunella modularis*. Ten breeding territories. 25 ringed during CES.

ROBIN, *Erithacus rubecula*. Three breeding territories. Peak counts were 20 on 23/9 and 14 - 16/10.

RED-FLANKED BLUETAIL, *Tarsiger cyanurus*. A first winter

male/female 16th - 19th Oct (D.K.Graham) First record for the NNR.

BLUETHROAT, *Luscinia svecica*. No records in 1999.

BLACK REDSTART , *Phoenicurus ochruros*. No records in 1999.

REDSTART, *Phoenicurus phoenicurus*. 1 on 27/4; May - 1 - 2 on 5 dates between 6th - 14th; 1 on 27/8; Sep - 5 on 19th and 23rd, 1 on 25th; Oct - 1 on 16th.

WHINCHAT, *Saxicola rubetra*. May - first two on 7th, 3 on 9th, 1 on 26th; Aug - singles on 11th and 18th; Sep - 1 - 2 daily 7th - 27th but with 9 on 21st and 12 on 23rd.

STONECHAT, *Saxicola torquata*. Aug - single imms on 13th and 22nd; Sep - single on 20th and 27th, 2 on 28th - 30th; Oct - single on 5th, 6th and 17th, single on 3/11.

WHEATEAR, *Oenanthe oenanthe*. Mar - first one on 17th , 16 on 29th; Apr - unusually low numbers with max. of only 14 on 9th; May - again unusually low numbers with only 1 - 3 on four dates; Aug - 2 on 11th, 1 on 22nd; Sep - 1 - 2 9th - 19th then 20 21st - 23rd.

RING OUZEL, *Turdus torquatus*. Sep - 2 on 19th, 1 on 23rd and 27th; single on 16/10.

BLACKBIRD, *Turdus merula*. Five beeding territories. 14 ringed during CES. Peak count was c.100 on 16/10.

FIELDFARE, *Turdus pilaris*. Mar - singles on 15th and 24th; Apr - 1 on 18th, 2 on 23rd; 10 on 7/5; very low numbers in autumn with max. of only 20 on 15/10.

SONG THRUSH, *Turdus philomelos*. Two breeding territories. Peak counts were 15 on 27/9 and 10 on 15/10.

REDWING, *Turdus iliacus*. Singles on 18/3 and 16/5. Low numbers in autumn with peaks of 40 on 27/9 and 50 on 15/10.

MISTLE THRUSH, *Turdus viscivorus*. One breeding territory. No other significant counts.

GRASSHOPPER WARBLER, *Locustella naevia*. Singles on 30/5 and 12/8.

SEDGE WARBLER, *Acrocephalus schoenobaenus*. First 1 on 23/4. Nine breeding territories and a record 106 ringed during CES. Last record on 7/9.

REED WARBLER, *Acrocephalus scirpaceus*. Aug - singles on 4 dates

between 11th and 27th with 2 on 28th; Sep - singles on 14th and 22nd.

ICTERINE WARBLER, *Hippolais icterina*. Aug - single on 28th and 29th.

BARRED WARBLER, *Sylvia nisoria*. Aug - single on 26th and 29th.

LESSER WHITETHROAT, *Sylvia curruca*. May - 1 on 5th, 3 on 6th, 5 on 8th and 9th, 1 on 10th, 1 on 26th; Sep - singles on 14th, 17th and 19th; Oct - single 16th to 21st.

WHITETHROAT, *Sylvia communis*. One breeding territory. Apr - 1 on 27th ; May - 2 on 4th, 5 on 9th, 3 on 13th, 1 on 26th; Aug - single on 21st and 24th.

GARDEN WARBLER, *Sylvia borin*. May - singles on 9th and 13th; Aug - 2 on 21st, 1 on 28th; Sep - 1 - 5 on 7 dates between 11th and 21st then 6 on 23rd.

BLACKCAP, *Sylvia atricapilla*. One breeding territory. Apr - first 1 on 17th, 1 on 29th; May - 1 - 5 on 7 dates; Aug - 5 on 11th, 3 on 21st; Sep - 5 on 11th, 10 on 21st and 23rd; Oct - 2 on 17th, 8 on 20th and 21st, 10 on 22nd, 15 on 23rd then singles to end of month; 1 on 3/11.

GREENISH WARBLER, *Phylloscopus trochiloides*. Aug - single from 26th to 29th.

PALLAS'S WARBLER, *Phylloscopus proregulus*. Oct - single 20th to 22nd and 25th.

YELLOW-BROWED WARBLER, *Phylloscopus inornatus*. Sep- single on 21st and 22nd ; Oct - singles on 3rd, 16th, 20th - 22nd and 25th.

WOOD WARBLER, *Phylloscopus sibilatrix*. Aug - 1 on 25th.

CHIFFCHAFF, *Phylloscopus collybita*. Apr - 1 on 9th then singles on 3 dates; May - 1 - 3 on 7 dates between 3rd and 13th; Jun - single on 3rd ; Sep - 1 on 17th, 2 on 27th; Oct - 1 - 3 on 6 dates between 17th and 29th; singles on 1/11 and 18/12.

WILLOW WARBLER, *Phylloscopus trochilus*. 4 breeding territories. 30 ringed during CES. Apr - 1 on 4th, 2 on 16th, 6 on 23rd; May - 10 on 6th; Aug - 20 on 26th, 10 on 31st; Sep - 30 on 7th,6 on 11th, 5 on 21st and 23rd; Oct - 2 on 16th, 1 on 20th.

GOLDCREST, *Regulus regulus*. No significant spring records. Sep - 30 on 7th, 20 on 14th and 26th; Oct - 30 on 5th, 14th and 20th with 40 on 23rd ; Nov - 10 on 3rd decreasing to 3 by 24th.

FIRECREST, *Regulus ignicapillus*. Oct - single 23rd - 29th (ringed); Nov - single 1st to 3rd (unringed).

SPOTTED FLYCATCHER, *Muscicapa striata*. May - 16th - 9th and 13th, 2 on 26th, 1 on 29th; Jun - singles on 3rd and 16th; Sep - 1 - 2 on 5 dates between 9th and 21st.

RED BREASTED FLYCATCHER, *Ficedula parva*. No records in 1999.

PIED FLYCATCHER, *Ficedula hypoleuca*. May - singles on 6th, 7th and 13th; Aug - 1 on 11th, 4 on 26th, 2 on 27th, 1 on 28th ; Sep - 1 on 15th - 16th, 5 on 19th - 20th, 10 on 21st, 4 on 23rd then 1 - 2 daily to 28th; Oct - 1 on 16th.

LONG TAILED TIT, *Aegithalos caudatus*. Oct - 6 on 16th - 17th, 4 on 22nd; 8 on 19/12.

MARSH TIT, *Prus palustris*. No records in 1999.

COAL TIT, *Parus ater*. One breeding territory. No other significant counts.

BLUE TIT, *Parus caeruleus*. Two breeding territories. 20 on 7/9.

GREAT TIT, *Parus major*. One breeding territory. 10 on 7/9.

NUTHATCH, *Sitta europaea*. One on 9/4

TREECREEPER, *Certhia familiaris*. Single on 7/9.

RED BACKED SHRIKE, *Lanius collurio*. One female on 29/5.

MAGPIE, *Pica pica*. 2 on 16/4; 1 on 4/7; 1 on 19/8; 4 on 27/9; 1 on 12/11. Frequent at Northfield.

JACKDAW, *Corvus monedula*. Nested on cliffs but no counts.

ROOK, *Corvus frugilegus*. No significant counts.

CARRION CROW, *Corvus corone*. A record 12 nests located but no other counts.

RAVEN, *Corvus corax*. Singles seen on 19/1, 30/3, 3/8, 2 on 2/9. Three young fledged from nest at NT 896 692 on 16/4.

STARLING, *Sturnus vulgaris*. 40 on 28/5 was the only significant count.

TREE SPARROW, *Passer montanus*. 1 on 30/4.

CHAFFINCH, *Fringilla coelebs*. Eight breeding territories. No other significant counts.

BRAMBLING, *Fringilla montifringilla*. 1 on 24/4; 1 on 19/9; Oct - singles on 5th and 15th, 10 on 16th, 8 on 17th, 4 on 20th and 22nd.

GREENFINCH, *Carduelis chloris*. 6 on 18/3; 2 on 29/4.

GOLDFINCH, *Carduelis carduelis*. One breeding territory. 8 on 28/4 was only other significant count.

SISKIN, *Carduelis spinus*. Sep - singles on 16th and 23rd; Oct - 3 on 21st, 2 on 29th.

LINNET, *Carduelis cannabina*. Nine breeding territories and 13 ringed during CES.

REDPOLL, *Carduelis flammea*. Singles on 22/4 and 12/10.

CROSSBILL, *Loxia curvirostra*. 2 Nf 22/9.

BULLFINCH, *Pyrrhula pyrrhula*. Aug - 1 on 31st; Sep - 2 on 11th, 1 on 14th; Oct - singles on 14th and 22nd.

SNOW BUNTING, *Plectrophenax nivalis*. Oct - 1 on 10th, 4 on 12th, 9 on 17th, 10 on 25th, 2 on 27th.

YELLOW HAMMER, *Emberiza citrinella*. Three breeding territories. No other significant counts.

REED BUNTING, *Emberiza schoeniclus*. Two breeding territories. 5 on 13/1.

ARCHAEOLOGICAL NOTES – 1999

NORTH NORTHUMBERLAND

Elizabeth Williams
Sites & Monuments Records Officer,
County Hall, Morpeth, Northumberland NE61 2EF

ANCROFT, SCREMERSTON HILL (NU 0030 4747 and NU 0022 4815). Two evaluation trenches were excavated by AOC Archaeology on behalf of Scottish Power across the projected line of the Devil's Causeway Roman road. However, no archaeological features were discovered.

BERWICK UPON TWEED, 52 CASTLE TERRACE (NT 987 540). A series of evaluation trenches were excavated by Northern Archaeological Associates for Westmorland & Worcester Properties Ltd in an area close to the site of the medieval village of Bondington and 100m W. of a possible church excavated in the 19th century. A possible boundary containing two sherds of medieval pottery was uncovered pre-dating the 18th/19th century field pattern.

BERWICK UPON TWEED, BRUCEGATE (NT 9966 5332). The impact of a development by John Gray Homes Ltd between the Edwardian and Elizabethan town walls was investigated by assessment (Tyne and Wear Museums) and evaluation (Pre-Construct Archaeology). Previous reports of burials found at the site in the 1950s were confirmed when a service trench, dug in 1999 without archaeological supervision, uncovered human remains. The assessment revealed that the earliest reference to Brucegate dates to 1313 when it was recorded as Burghgate. The same reference records that streets had been laid out and the land given over to the burgesses to build on.

The evaluation located evidence of 13th and 14th century activity in two trenches situated at the NW. and NE. corners of the site. The features uncovered include a possible well and a stone surface that may be associated with housing fronting on to Castlegate and a robbed out wall and a ditch are thought to represent medieval plot

boundaries. A series of pits was also located with the greatest concentration lying in what was the rear of the medieval plot. The discovery of an inhumation, taken together with the previously reported human remains, suggests part of a medieval cemetery lies within the site. All these features were covered by a series of dumped levelling deposits of 14th to 16th century date which may represent a period of abandonment around the time the Elizabethan walls were constructed in 1558. Later activity on the site was shown by a further series of pits of 15th to 16th century date, one of which produced evidence of malting. Post-medieval soil horizons sealed these deposits.

BERWICK UPON TWEED, GOLDEN SQUARE (NT 9972 5292). An evaluation in an area W. of the medieval core of the town was carried out by Lancaster University Archaeological Unit for Bain Swan Architects on the site of a former garage. Three deposits of probable medieval date were revealed and medieval pottery was recovered from the uppermost layer. The remaining layers are similar in character to medieval deposits excavated by Lancaster University Archaeological Unit at Marygate, in the centre of Berwick, which comprised burgage back plots. Together, the three layers comprise a maximum depth of 1.5 m of potential medieval stratigraphy below modern disturbance.

BERWICK UPON TWEED, MARYGATE (NT 9979 5302). An area c. 30 m by 11 m was excavated by Lancaster University Archaeological Unit for Terrace Hill Projects Ltd on the street frontage. A large number of pits were found across the site and at least 45 were excavated, the largest measured 5 m in diameter by 1.6 m deep. Most appear to be medieval in date and were probably used as rubbish pits; the pottery recovered from the pits included a large proportion of 13th or 14th century wares. Organic preservation across the site was excellent and finds included wooden and leather artifacts, plant matter and bones from fish, birds and marine mammals. Evidence of medieval buildings was also revealed in the form of three post pits which are believed to represent the foundations of the back wall of a timber building. A very substantial oak post was found within a posthole at the rear and may suggest a second structure of high status. To the rear of the site evidence of medieval property boundaries was uncovered and

included some timbers in situ. Several other features were also revealed including a medieval stone-lined pit and a stone-lined well which had been filled and capped in the medieval period.

CHATTON, CHATTON VILLAGE (NU 0545 2820). An evaluation was carried out by Pre-Construct Archaeology for GeoQuest Associates on behalf of The Northumberland Estates at the west end of the village in an area abandoned in the late 18th or early 19th century. Chatton is known to have existed since at least the 13th century when it was granted the right to hold a market and fair. An assessment of the site concluded that it had probably once been part of the medieval village. The evaluation revealed the robbed-out remains of probable 18th century cottages which, together with their gardens, were levelled in the 19th century. However, beneath these remains a number of medieval features were found, including property boundaries, pits and a large post pad in association with 13th century pottery which appears to be part of the foundations of a medieval building.

MILFIELD, KIMMERSTON ROAD END (NT 940 356). An evaluation by C. Waddington and The Archaeological Practice, University of Newcastle for the Milfield Archaeological Landscape Project was undertaken close to the site of the 7th-century royal medieval township of Maelmin. One trench revealed a series of parallel postholes for a wooden building which is considered likely to be contemporary with the Maelmin settlement. The building lies outside the great enclosure which surrounds the settlement and indicates that it probably had extra-mural settlement associated with it. A magnetometry survey by TimeScape Archaeological Surveys revealed a number of anomalies including ditches and possible pits. An area 38 m by 38 m, on which a reconstruction of a henge is to be built, was opened and revealed a series of steep-sided postholes set in a straight line across the site. They are widely spaced and lie roughly parallel with traces of ridge and furrow cultivation visible in the trench and are believed to represent a field boundary. The post holes contained evidence for the cultivation of bread wheat, barley and oats and radiocarbon dating of a sample of bread wheat has confirmed an early medieval date (2 sigma calibrated date Cal A.D. 705 to 885, Beta-139716 1220(30BP).

WOOLER, ST MARY'S PARISH CHURCH (NT 993 280). A watching brief was carried out in the graveyard by Northern Counties Archaeological Services on behalf of the Parish Council. The present church dates from 1765 and replaced an earlier building, possibly of 12th century date. The foundations of a building pre-dating the present church were found N. of the nave. Amongst a deposit of rubble at the W. end of the nave was a fragment of nailhead or dogtooth moulding, possibly from the 12th century foundation.

SCOTTISH BORDERS

Dr J. S. Dent
Principal Officer (Archaeology & Countryside)
Scottish Borders Council

ANCRUM, JOINER'S YARD. Scotia Archaeology carried out a small-scale investigation of part of the street frontage on the village green. Remains of two late 18th/early 19th century cottages were located, but no trace of earlier settlement.

BROUGHTON, BROUGHTONKNOWE. A watching brief by AOC Archaeology Group adjacent to a complex of prehistoric ritual and domestic activity (Scheduled Ancient Monument 2923) recorded no features of archaeological significance.

BROUGHTON, DREVA CRAIG. Headland Archaeology Ltd carried out a watching brief in connection with a telecommunications mast. Although located in an area of visible prehistoric settlement remains, the works disturbed no archaeological features.

COLDINGHAM, ABBEY YARDS FIELD. A geophysical survey carried out by GUARD investigated the field immediately east of the medieval priory. Potential, but as yet untested, features revealed by the survey included likely ditches and stone spreads consistent with the location within the priory precinct, and a possible curvilinear enclosure of prehistoric character.

HUME, HAREHEUGH CRAIGS. AOC Archaeology Group carried out a programme of work on this volcanic outcrop, which is occupied by a hill fort and remains of a post-medieval settlement. The work consisted of an archaeological field survey, rapid auger survey with test pitting and evaluation works. The last examined parts of the post-medieval field system, areas of the farmstead, a spring and deposits at the foot of the hill fort. It is known that an English army camped at Hareheugh in 1547, and a settlement of that name is marked on Pont's map of c. 1585, but the farmstead was occupied into the 19th century, and the few artefacts recovered reflect this later occupation.

INNERLEITHEN, CARDRONA VILLAGE. AOC Archaeology Group carried out limited excavations, and subsequently monitored more extensive soil stripping, on an area of the Tweed flood plain. Two clusters of pits were examined, and one of these was associated with a truncated ring-groove. However, the only artefact recovered was an unstratified sherd of hand-made pottery.

MELROSE, ANNAY ROAD. Scotia Archaeology carried out a watching brief on a drainage trench within the monastic precinct and recorded truncated remains of two possible walls, one of which ran parallel with foundations excavated in 1998 and reported in Vol. 47, 312.

NEWLANDS, DROCHIL HILL. The Centre Field Archaeology carried out a watching brief on the extension of a telecommunications mast close to the site of two presumed burial cairns. No archaeological features were encountered.

NEWSTEAD, TOWNHEAD FARM. Scotia Archaeology conducted an evaluation at the east end of Newstead village ahead of residential development. No trace was found of Roman roads, which suggests that the site lies between the course of two roads which ran westwards from the site of *Trimontium*. No archaeological traces were seen of the medieval settlement of Newstead, but remains of a 16th or 17th century cottage were incorporated into the boundary wall fronting the village street. This cottage was occupied well into the 20th century and parts of all four walls survived.

Thursday, 25th May. KELSO AND NEWTON DON

The first meeting of the season was blessed with a warm and sunny day. We started with about 80 people. Numbers fluctuated in the course of the day and possibly about 100 members attended at some time.

The first part of the day was Kelso Town Walk taken, in four parties, by members of Kelso and District Amenity Society. This was fascinating and many of us saw aspects of buildings we had not previously noticed.

From there we went to Kelso Racecourse and were given a most interesting talk by Mr David Thomson on the history of horse racing in Scotland and of Kelso Racecourse in particular. The party then had the luxury of eating their picnic lunches sitting at tables in the grandstand.

The afternoon was spent at Newton Don, where Mr and Mrs W. A. Balfour showed us every kindness. We were given a talk on the history of Newton Don and then taken on conducted walks through the policies. These are impressive and are in course of being restored. There are some excellent views and the falls of the River Eden are beautiful.

K. H. Candlish

Wednesday, 16th June. CRAGSIDE

The second meeting of the 1999 season was held at Rothbury, Northumberland, when the Club visited the National Trust-owned Cragside Estate on a warm, sunny day, with the rhododendrons at their peak. Some 63 members were present.

Unfortunately the day was dogged by administrative problems. Although the booking had been made in January, and after a detailed meeting with a member of their staff, the Trust had failed to process it internally, and all manner of difficulties were raised on the day before the visit, and indeed on the day itself. As a result the detailed programme for the day had to be modified at the last minute.

However, members heard an excellent talk on the history of the

Armstrong family and Cragside from Mr Mathew Wilkinson, the House Steward, before dispersing to visit the gardens, the Visitor Centre, the Power Circuit, which had provided the first domestic electricity supply in Britain to the house, and enjoy the woodland picnicing facilities available among the seven million trees planted by the first Lord Armstrong. After lunch we were able to enter the house, which has retained the characteristics of its Victorian greatness, both externally and internally.

Tea was taken at Milfield on the return journey.

P. J. Johnson

Wednesday, 21st July. LAUDER

The third meeting of the Berwickshire Naturalists' Club took place on Wednesday, 21st July when over 100 members visited Lauder and Thirlestane Castle. Members gathered in Lauder Kirk where they were addressed by the minister, the Rev. John Shields, who gave them a most informative and amusing account of the history of the church and its architecture. Proceeding across the High Street, members then visited the Town Hall and old gaolhouse where they learnt more of the history of the historic burgess system. It was noted that the former women's cell of the old gaol is now occupied by the Official Registrar's Office where a different sort of life sentence can now be entered into.

Lunch having been taken in the grounds of Thirlestane Castle, Club members were able to visit the Castle and admire the magnificent rooms and exhibitions. Members were most grateful to the staff and volunteer guides who made them most welcome and gave so much information on the Castle and the Maitland family. The Club was privileged to be able to visit the newly refurbished apartment in the upper part of the Castle which is not normally open to the public.

Many members enjoyed tea in the excellent tea rooms in the Castle and all agreed that the Castle was well worth a visit and made a very enjoyable day out.

Simon Furness

Thursday, 18th August. CRICHTON CHURCH & CASTLE

For its fourth meeting of the 1999 season the Berwickshire Naturalists' Club visited Crichton Collegiate Church and Castle

and the Scottish Mining Museum (Lady Victoria Colliery).

Inside Crichton Kirk about 100 members of the Club were given a very informative talk by Mr Andrew Barr, one of the trustees, about its history and its purpose as a teaching and singing college. He also explained the various physical changes which had been made to the building over the centuries and that it was still in the process of change as it was now owned by a trust and run by the Friends of Crichton.

Being one of the few very wet days of the summer, Dr Alan Rutherford, an inspector with Historic Scotland, then gave an interesting talk inside the kirk about the Crichton family and their many links with the crown. He also gave an introduction to its history before leading the party along to the castle, where he pointed out fascinating features, including some beautiful masonry. Despite the weather, it was enjoyed by all who made the short journey to the magnificent castle.

A picnic lunch was taken at the car park by some members, while others travelled to the Scottish Mining Museum, which had only recently opened a new extension and visitor centre.

In the afternoon members were free to walk around the Mining Museum guided by 'magic helmets' (incorporating remote-controlled headphones) which brought the tour to life and explained the various parts of the exhibition and museum, including the 'virtual coalface'. Club members were impressed by the museum and enjoyed the experience. A very pleasant afternoon tea was held at the museum's new restaurant.

A. C. A. Cartwright

Thursday, 16th September. NATIONAL GLASS CENTRE

The fifth and last field meeting of the 1999 season took place on Thursday, 16th September when some 90 members visited St Peter's Church, Monkwearmouth, one of the oldest churches in Britain, built in AD 674 as part of a monastery. Now a parish church, it was rebuilt over the ages, with a major restoration in the 1870s. Following an arson attack in 1984, the nave sanctuary and exhibition area were built, the chancel ceiling was repainted, and a Copeman-Hart organ installed. John Atherton, a parish volunteer attended by his faithful yellow labrador, spoke with a wealth of anecdotes on the history of the site, the connection with Bede, and

the establishment of Monkwearmouth as the birthplace of British stained glass.

This was a very suitable introduction to the afternoon spent at the adjacent National Glass Centre. The interactive exhibits in the Kaleidoscope Gallery led the visitor over the furnaces to the demonstration area, where glass making sessions proved most interesting. Both the shop and restaurant received patronage. It proved too chilly to sit on the benches by the River Wear for picnics.

Those on the bus from Berwick stopped at Heighleygate Garden Centre for tea, whilst the bus with passengers from Duns, Coldstream and Wooler called at Longframlington Gardens, a new venture of Hazel Huddleston, lately of Ford Gardens. Purchases were made by many.

Although a long day, it was voted very successful.

Bridget R. Darling

Extra Meetings

Thursday, 1st July. COVE HARBOUR

About 35 members gathered at the Cove car park on a bright sunny afternoon. Dr John Gordon and S.N.H. explained aspects of the geomorphology of the area. The landscape had been shaped by the most recent ice age, leaving fine debris in the form of boulder clay covering the top of the sandstone cliff and was the source of a wide variety of pebbles on the beach below. Evidence of changes in sea level can be traced in the raised beaches and rock platform of the present shore.

Mr Ben Tindall, architect, the owner of Cove Harbour, outlined the history of the buildings of the harbour and the number of boats using it over the years, ending with a description of the previous owners.

The party made its way down the steep access road above the sea, which continues to deteriorate as boulder clay slips over the sloping underlying rock. Shortly above the harbour the access tunnel cuts through the Old Red Sandstone beds emerging on the beach opposite the harbour wall. The caves are entered through a steel door on the south side of the tunnel. The caves themselves are cut at right-angles to a main passage linking their entrances. The caves differ in length and width but are all rectangular in plan and

high enough to stand upright in, although some have lower openings. The main passage is about 35m long and 3m wide which, with the caves, represents a considerable effort in excavating the sandstone, presumably by hand, although it is not clear what was done with the quarried material.

Returning to the beach the speakers answered questions. There was much speculation about the original purpose of the caves, whether for stores for fish or even coal, or for hiding smuggled goods, the last supported by the proximity of the coastguard/excise houses at the top of the cliff.

The President thanked Mr Tindall for a most interesting and informative visit.

P. J. Tansley & Felicity Cooklin

Thursday, 14th October. THE TWEEDDALE PRESS GROUP

Some 50 members gathered at the premises of the Tweeddale Press Group in Berwick upon Tweed where we were warmly welcomed by Mr David Johnston, Editor of *The Berwickshire News*. After a brief talk by Mr Johnston we were given a most interesting and informative talk by Mr Tony Langmack on the history of the Tweeddale Press Group. This was enlivened with flashes of humour.

The members were then divided into two groups, one being given a tour of the premises while the other had coffee. The roles were then reversed. The tour was most interesting and the staff most patient and helpful in explaining the very high tech nature of producing a newspaper.

Altogether a worthwhile visit.

Kenneth H. Candlish

LIBRARIAN'S REPORT – 1999

The Library continues to be consulted by members and other researchers. Member's library tickets were issued to all members in February and the reverse was used to give notice of the 1999 meetings and of the need for members to pay their subscriptions. it is hoped to continue this annually in the future. Tickets give access to the Clock Block in the Berwick Barracks complex. Access to other parts of the Barracks is by payment of the appropriate charge. Tickets are not transferable to other persons. Because of recent reductions in staffing and opening times, members who wish to use the Library are advised to telephone the Museum Curator to confirm access. The Museum telephone number is Berwick (01289) 330933.

Acquisitions this year include a unique gift, perhaps the first of many such gifts. At the September Club visit to Monkwearmouth Church, possibly the oldest church in the north-east, the Club was brought up to date by the presentation of a video on the subject of that church. On this occasion precedent may perhaps be relaxed to allow it to be borrowed by members.

A second unusual gift was made by George Whiteley of Hull. He has written his idiosyncratic memoirs *National Service in Berwick, 1948/49*. It provides an interesting dip and no doubt in years to come some researcher will find something of interest and importance in it.

From an anonymous source came:

Allan, J. S., 1970, *My Picture Gallery of Memory*.

Douglas, H., 1968, *Portrait of the Burns Country*.

Nock, O. S. and Cross, D., 1960, *Main Lines across the Border*.

And given by the author was:

Sproule, B. J., 1998, *The Rev. Adam Thomson*.

Purchases have continued to be made, including:

Borders Family History Society, 1998, *The Monumental Inscriptions of Ayton*.

Borders Family History Society, 1998, *The Monumental Inscriptions of St Boswells*.

Cleat, L. and McLelland, I., 1999, *Life at Langton*.

English Heritage, 1998, *Norham Castle*.

Grove, D., 1997, *Jedburgh Abbey*.
Hogg, C. F., 1987, *Crichton Collegiate Church*.
Kerr, A., 1985, *Ferniehurst Castle*.
McIntyre, D. and McKirdy, A., 1997, *James Hutton*.
Mitchell, A., 1999, *Historic Kelso*.
Robson, M., 1998, *Surnames and Clansmen*.
Sellar, M., 1989, *Denholm, A History of the Village*.
1999, *Norham Castle*.

LIBRARIAN'S FINANCIAL STATEMENT FOR THE PERIOD ENDED 11th SEPTEMBER 1999

INCOME	£	EXPENDITURE	£
Opening balance	2295.07	Postage	7.45
Interest (nett)	59.43	Books	113.64
Sales of Histories	103.17	Etc	6.05
		Closing Balance	2330.53
	2457.67		2457.67

G. A. C. Binnie

FINANCIAL STATEMENT FOR THE YEAR ENDED 30th JUNE 1999

GENERAL CLUB FUND

RECEIPTS		PAYMENTS	
Members' Subscriptions		**Members' Services**	
Annual (including arrears)	£3370.00	Printing: 'History'	£2030.00
Entrance Fees	58.00	Club Rules	71.50
Tax Rebate on Covenants	201.15	Programme/Library Cards	112.98
		Insurance – Books	208.00
		Posts, etc.	211.72
	£3629.15		£2634.20
Club Meetings		**Club Meetings**	
Guest Fees	54.00	Notices/Circulars	728.81
		Insurance – public liability	192.40
		Hire of Hall	40.00
		Expenses – arranging visits	88.10
		Gifts to Hosts – paper weights	227.00
	£54.00		£1276.31
Other Receipts		**Other Payments**	
Bank Interest (gross)	134.00	Printing/Stationery	92.59
Sale of Badges/Ties	99.00	Treasurer's Expenses	43.55
Grant – Historic Scotland	204.43	Secretary's Expenses	40.00
Donations	15.00		
	£452.43		£176.14
Total Receipts	4135.58	**Total Payments**	4086.65
Overspent		Underspent in year	49.93
	£4135.58		£4135.58

STATEMENT OF FUNDS WITH ROYAL BANK OF SCOTLAND

General Club Fund		**Natural History Publication Fund**	
Cash held at 30/6/98	£5223.61	Cash held at 30/6/98	£3293.86
Add underspent in year	48.93	Add Bank Interest (gross)	97.93
		Sundry Lodgements	21.00
Cash held at 30/6/99	£5272.54	Cash held at 30/6/99	£3412.79

12/8/99

IAN M. FRASER, *Hon. Treasurer*

I have examined the books of The Berwickshire Naturalists' Club and from information and vouchers provided have found them to be correct and in order.

1/9/99

E. J. KELLIE, *Hon. Auditor*

ADVICE TO CONTRIBUTORS

Following upon discussion at the Council, the Editing Secretary has prepared the following revised advice to contributors.

The History of the Berwickshire Naturalists' Club has now run continuously for over a century and a half. It has recorded a very large amount of information about every aspect of life in the Borders: archaeology, genealogy, history, sociology, topography, and all branches of natural history. It is an invaluable repository for such primary information.

Manuscripts are best typed, double-spaced, and two copies sent; but even handwritten contributions, if clearly legible, can be considered.

References in **scientific articles** within the text or in notes at the end:

Books: author name(s); date of publication in brackets; title in italics; place of publication; publisher; page numbers if desired, e.g.

> Baxter, E. V., Rintoul, L. J. (1953). *The Birds of Scotland*, Edinburgh: Oliver and Boyd, 30-41.

Papers in journals: author name(s); date of publication in brackets; title of article in roman type within single inverted commas; title of journal in italics; volume number; page numbers, e.g.

> Taylor, G. (1937). 'List of fungi observed in the neighbourhood of Cockburnspath', *History of the Berwickshire Naturalists' Club*, 29, 303-313.

References in **arts articles** (history, literature, architecture, topography, antiquarianism, fine art):

Books: author name(s); title in italics; in brackets place of publication, publisher, date of publication; page numbers if desired, e.g.

> Patricia Clements, *Baudelaire and the English Tradition* (Princeton: Princeton University Press, 1985) pp. 50-61.

Papers in journals: author(s); title of article in roman type within single inverted commas; title of journal in italics; volume number; date in brackets; page numbers, e.g.

> Edna Kenton, 'Henry James to the Ruminant Reader: *The Turn of the Screw*', *The Arts* 6 (1924), pp. 245-255.

When other publications have been consulted but are not specifically cited, it may still be useful to guide readers following up the subject, to give a bibliography, citing the publications in the same way as for references above.

Illustrations should be numbered consecutively and provided with short descriptive captions.

Contributions are best sent directly to the Editing Secretary, but may be handed to any Council Member.

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HISTORY

OF THE

BERWICKSHIRE

NATURALISTS' CLUB

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Price £20.00

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